2007 ACCESSORIES AND EQUIPMENT

Power Locks - Electrical Diagnostics - Nitro

DIAGNOSTIC CODE INDEX

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DTC	Description
B1801	DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW - TIPM
B1803	DRIVER DOOR LOCK/UNLOCK SWITCH INPUT CIRCUIT STUCK LOCK - DDM
B1806	PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW - TIPM
B1808	PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK LOCK - PDM
B186F	ALL DOOR SECONDARY LOCK CONTROL CIRCUIT LOW - TIPM
B1870	ALL DOOR SECONDARY LOCK CONTROL CIRCUIT HIGH - TIPM
B1934	DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK - TIPM
B1935	PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK - TIPM
B198A	ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT LOW - TIPM
B198B	ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT HIGH - TIPM
B1A08	RKE FOB 1 PERFORMANCE
B1A09	RKE FOB 2 PERFORMANCE
B1A0A	RKE FOB 3 PERFORMANCE
B1A0B	RKE FOB 4 PERFORMANCE
B1A0C	RKE FOB 5 PERFORMANCE
B1A0D	RKE FOB 6 PERFORMANCE
B1A0E	RKE FOB 7 PERFORMANCE
B1A0F	RKE FOB 8 PERFORMANCE
B1A10	RKE FOB 1 BATTERY LOW
B1A11	RKE FOB 2 BATTERY LOW
B1A12	RKE FOB 3 BATTERY LOW
B1A13	RKE FOB 4 BATTERY LOW
B1A14	RKE FOB 5 BATTERY LOW
B1A15	RKE FOB 6 BATTERY LOW
B1A16	RKE FOB 7 BATTERY LOW
B1A17	RKE FOB 8 BATTERY LOW
B1A23	RKE RECEIVER PERFORMANCE

POWER LOCKS - ELECTRICAL DIAGNOSTICS

DIAGNOSIS AND TESTING

B1801-DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW - TIPM

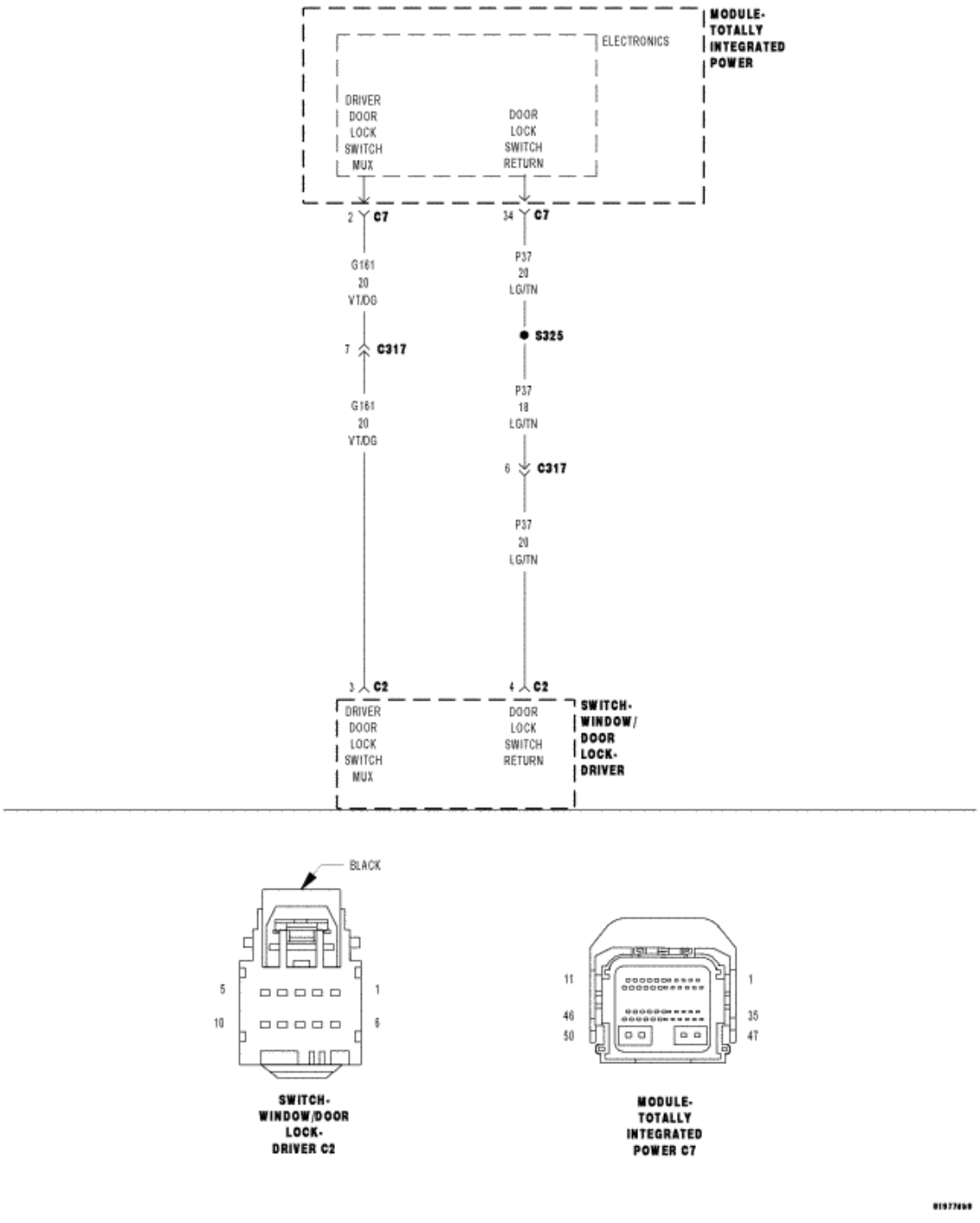


Fig. 1: Driver Door Lock Switch Mux Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously

Set Condition:

When the Driver Door Lock Switch Mux circuit is below 0.8 volts for over 10 seconds.

Possible Causes
(G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO GROUND
(G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT
WINDOW/DOOR LOCK SWITCH
TOTALLY INTEGRATED POWER MODULE (TIPM)

This test is only applicable for vehicles that do not have "Express Up" Power Windows.

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

With the scan tool, record and erase DTC's

Operate the Driver Door Lock Switch in all positions several times.

Cycle the ignition from on to off.

Turn the ignition on.

With the scan tool, read DTC's.

Does the scan tool display B1801-DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW?

Yes

Go to 2).

No

The conditions that caused this code to set are not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors.

Perform **BODY VERIFICATION TEST - VER 1** .

2) DOOR LOCK SWITCH SHORTED

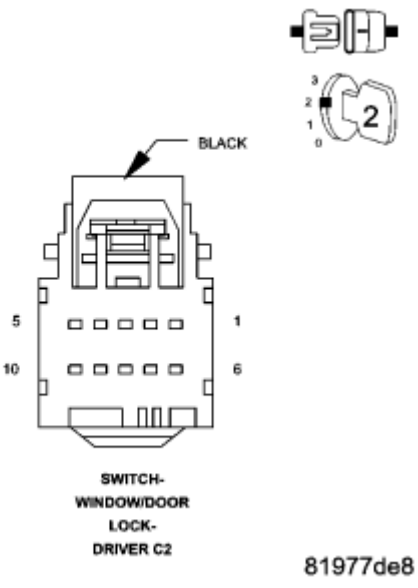


Fig. 2: Driver Window/Door Lock Switch C2 Connector
Courtesy of CHRYSLER LLC

With the scan tool, erase DTC's.

Disconnect the Driver Window/Door Lock Switch C2 connector.

With the scan tool, read DTC's.

Does the scan tool display B1801-DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW?

No

Replace the Driver Window/Door Lock Switch.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to 3).

3) (G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO GROUND

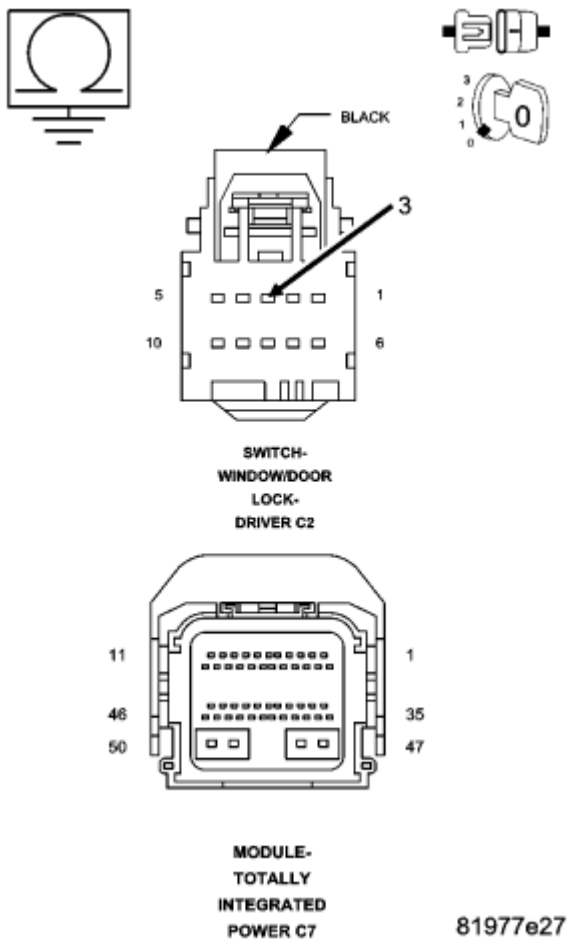


Fig. 3: Measuring Resistance Between Ground And (G161) Driver Door Lock Switch Mux Circuit In Driver Window/Door Lock Switch C2 Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the TIPM C7 connector.

Measure the resistance between ground and the (G161) Driver Door Lock Switch Mux circuit.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G161) Driver Door Lock Switch Mux circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 4).

4) (G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT

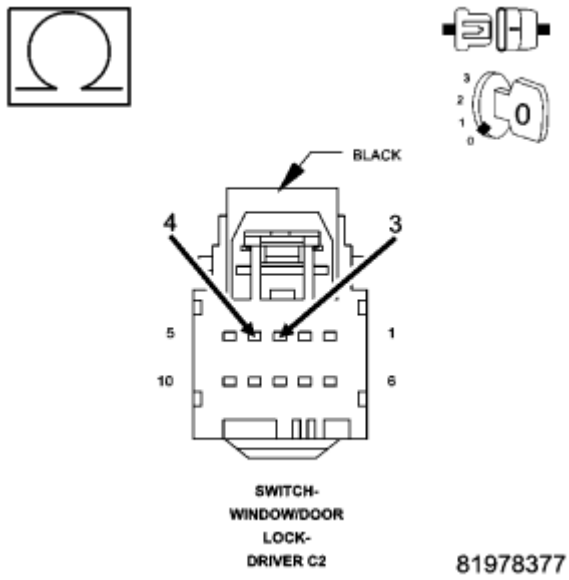


Fig. 4: Measuring Resistance Between (G161) Driver Door Lock Switch Mux Circuit And (P37) Door Lock Switch Return Circuit In Switch C2 Connector
Courtesy of CHRYSLER LLC

Measure the resistance between the (G161) Driver Door Lock Switch Mux circuit and the (P37) Door Lock Switch Return circuit in the switch C2 connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G161) Driver Door Lock Switch Mux circuit for a short to the (P37) Door Lock Switch Return circuit.

Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module (TIPM) in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .

B1803 - DRIVER DOOR LOCK/UNLOCK SWITCH INPUT CIRCUIT STUCK LOCK - DDM

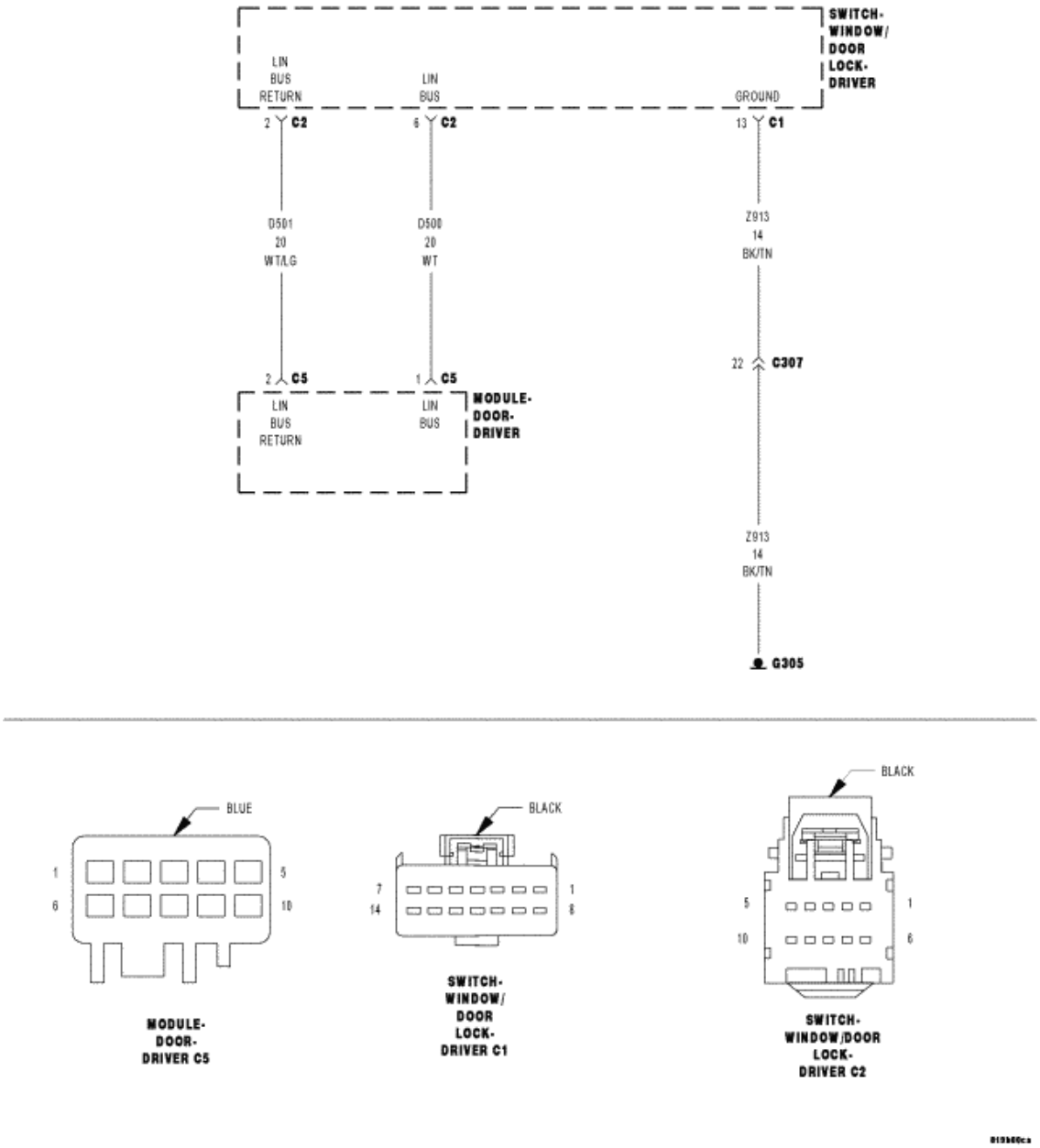


Fig. 5: Lin Bus Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously whenever the door module is awake.

Set Condition:

When the Lin Bus circuit is out of range for five seconds.

Possible Causes
(D500) LIN BUS CIRCUIT SHORT TO GROUND
(D500) LIN BUS CIRCUIT SHORT TO THE (D501) LIN BUS RETURN CIRCUIT
(D500) LIN BUS CIRCUIT OPEN
(D501) LIN BUS RETURN CIRCUIT OPEN
DOOR LOCK SWITCH
DRIVER DOOR MODULE

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

With the scan tool, record and erase DTC's

Operate the Driver Door Lock Switch several times.

Turn the ignition on and wait 30 seconds.

With the scan tool, read DTC's.

Does the scan tool display B1803 - DRIVER DOOR LOCK/UNLOCK SWITCH INPUT CIRCUIT STUCK LOCK?

Yes

Go to 2).

No

The conditions that caused this code to set are not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors.

Perform **BODY VERIFICATION TEST - VER 1** .

2) DOOR LOCK SWITCH

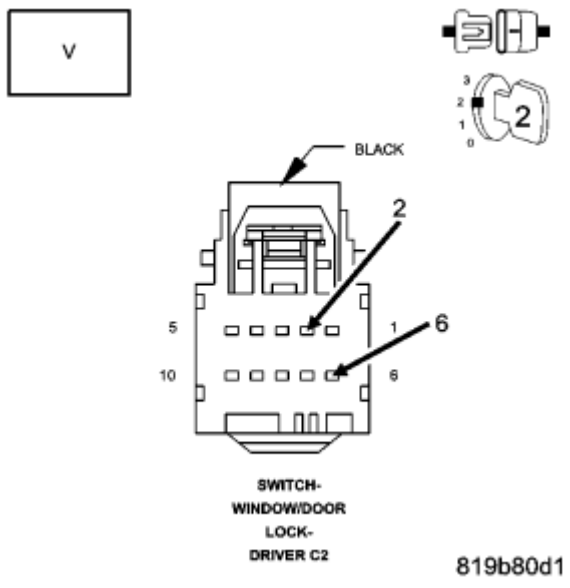


Fig. 6: Measuring Voltage Between (D500) Lin Bus Circuit And (D501) Lin Bus Return Circuit
Courtesy of CHRYSLER LLC

Disconnect the Driver Window/Door Lock Switch C2 connector.

Turn the ignition on.

Measure the voltage between the (D500) Lin Bus circuit and the (D501) Lin Bus Return circuit.

Is the voltage between 6.5 and 12.5 volts?

Yes

Replace the Driver Window/Door Lock Switch.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 3).

3) (D501) LIN BUS RETURN CIRCUIT OPEN

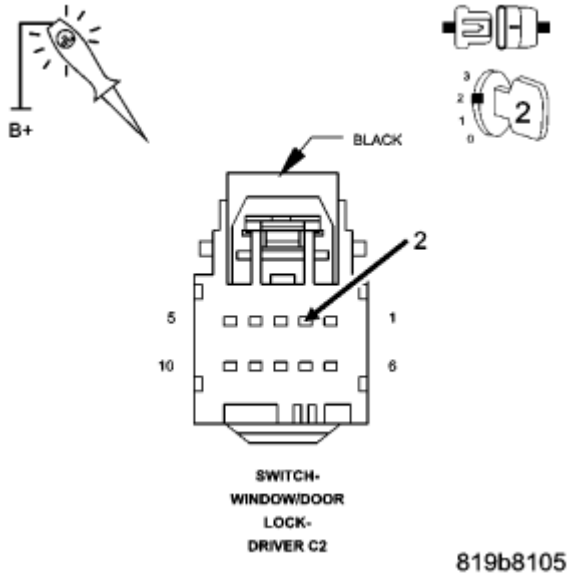


Fig. 7: Using 12-Volt Test Light Connected To 12-Volts To Check (D501) Lin Bus Return Circuit
Courtesy of CHRYSLER LLC

Using a 12-volt test light connected to 12-volts, check the (D501) Lin Bus Return circuit.

Does the test light illuminate brightly?

No

Repair the (D501) Lin Bus Return circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to 4).

4) (D500) LIN BUS CIRCUIT OPEN

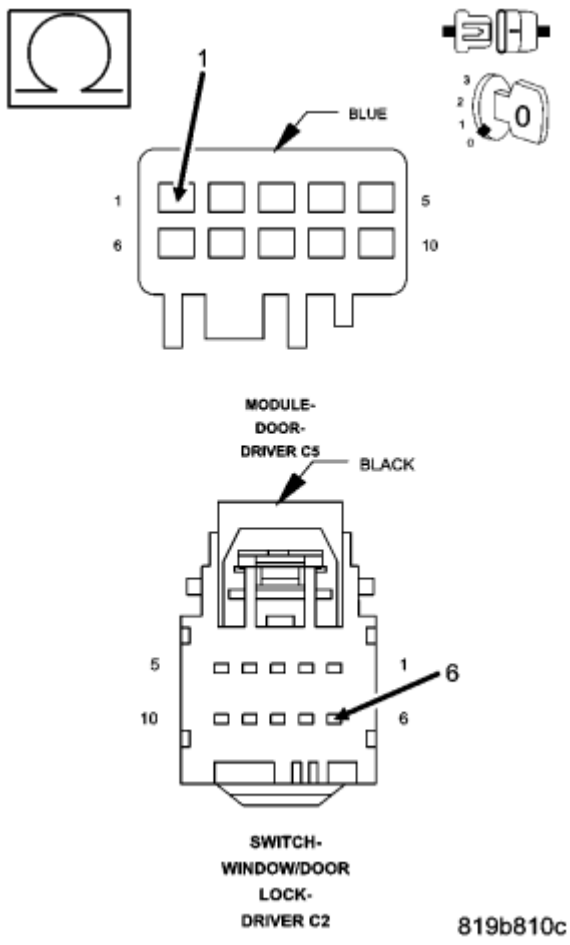


Fig. 8: Measuring Resistance Of (D500) Lin Bus Circuit Between Door Module C5 Connector And Window/Door Lock Switch Connector
Courtesy of CHRYSLER LLC

Disconnect the Driver Door Module C5 connector.

Measure the resistance of the (D500) Lin Bus circuit between the Door Module C5 connector and the Window/Door Lock Switch connector.

Is the resistance below 2.0 ohms?

No

Repair the (D500) Lin Bus circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to 5).

5) (D500) LIN BUS CIRCUIT SHORT TO THE (D501) LIN BUS RETURN CIRCUIT

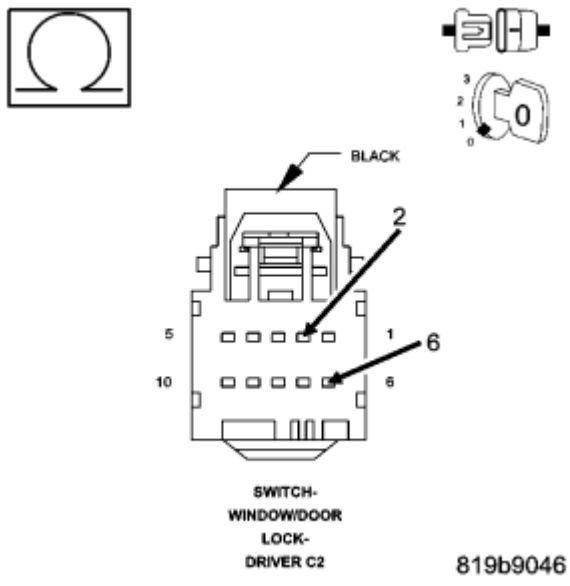


Fig. 9: Measuring Resistance Between (D500) Lin Bus Circuit And (D501) Lin Bus Return Circuit In Window/Door Lock Switch Connector
Courtesy of CHRYSLER LLC

Measure the resistance between the (D500) Lin Bus circuit and the (D501) Lin Bus Return circuit in the Window/Door Lock Switch connector.

Is the resistance below 10,000.0 ohms?

Yes

Repair the (D500) Lin Bus circuit for a short to the (D501) Lin Bus Return circuit.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Driver Door Module in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

B1806-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW - TIPM

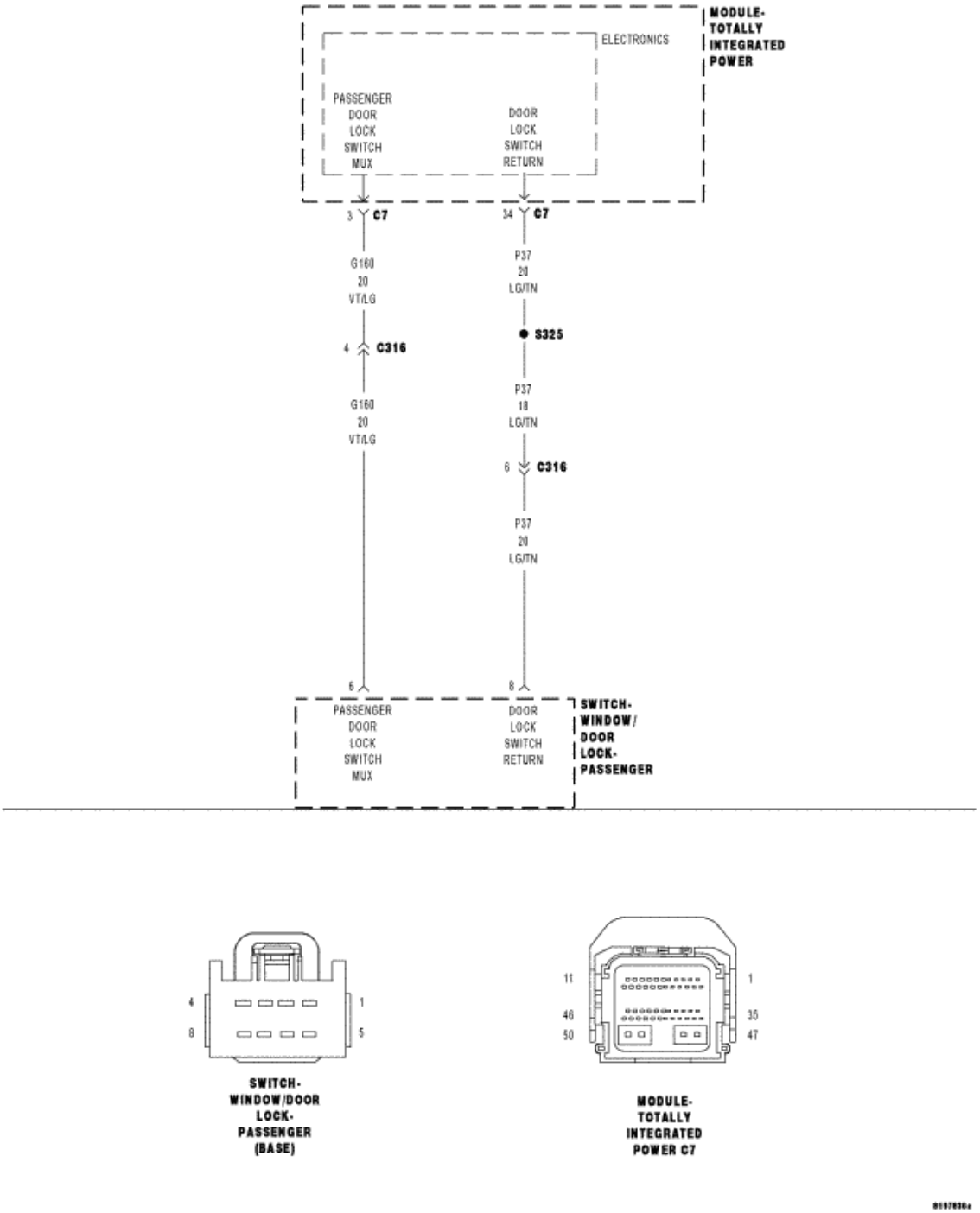


Fig. 10: Passenger Door Lock Switch Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously

Set Condition:

When the Passenger Door Lock Switch circuit is below 0.8 volts for over 10 seconds.

Possible Causes
(G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO GROUND
(G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT
WINDOW/DOOR LOCK SWITCH
TOTALLY INTEGRATED POWER MODULE (TIPM)

This test is only applicable for vehicles that do not have "Express Up" Power Windows.

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

With the scan tool, record and erase DTC's

Operate the Driver Door Lock Switch in all positions several times.

Cycle the ignition from on to off.

Turn the ignition on.

With the scan tool, read DTC's.

Does the scan tool display B1806-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW?

Yes

Go to 2).

No

The conditions that caused this code to set are not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors.

Perform **BODY VERIFICATION TEST - VER 1** .

2) DOOR LOCK SWITCH SHORTED

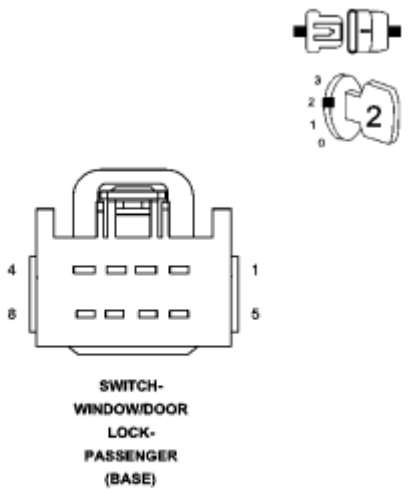


Fig. 11: Passenger Window/Door Lock Switch C2 Connector
Courtesy of CHRYSLER LLC

With the scan tool, erase DTC's.

Disconnect the Passenger Window/Door Lock Switch C2 connector.

With the scan tool, read DTC's.

Does the scan tool display B1806-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT LOW?

No

Replace the Passenger Window/Door Lock Switch.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to 3).

3) (G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT PARTIAL SHORT TO GROUND

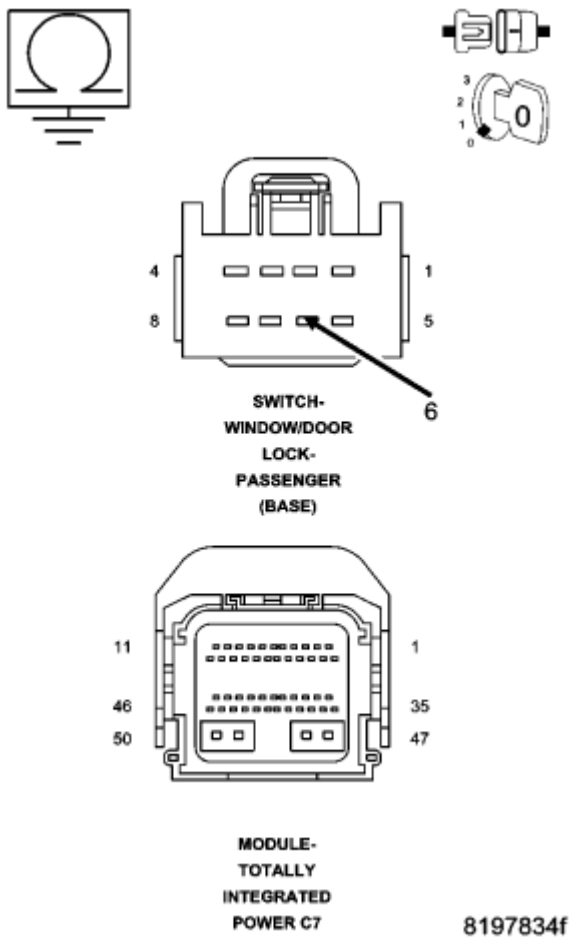


Fig. 12: Measuring Resistance Between Ground And (G160) Passenger Door Lock Switch Mux Circuit
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the TIPM C7 connector.

Measure the resistance between ground and the (G160) Passenger Door Lock Switch Mux circuit in the Passenger Window/Door Lock Switch C2 connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G160) Passenger Door Lock Switch Mux circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 4).

4) (G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT

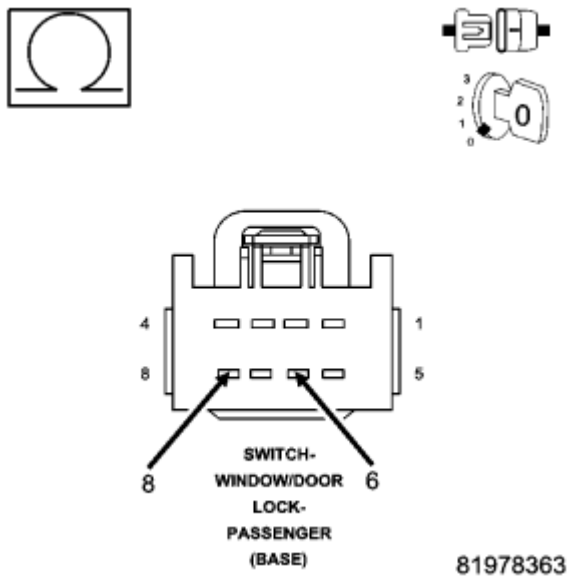


Fig. 13: Measuring Resistance Between (G160) Passenger Door Lock Switch Mux Circuit And (P37) Door Lock Switch Return Circuit In Switch C2 Connector
Courtesy of CHRYSLER LLC

Measure the resistance between the (G160) Passenger Door Lock Switch Mux circuit and the (P37) Door Lock Switch Return circuit in the switch C2 connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G160) Passenger Door Lock Switch Mux circuit for a short to the (P37) Door Lock Switch Return circuit.

Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module (TIPM) in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .

B1808-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK LOCK - PDM

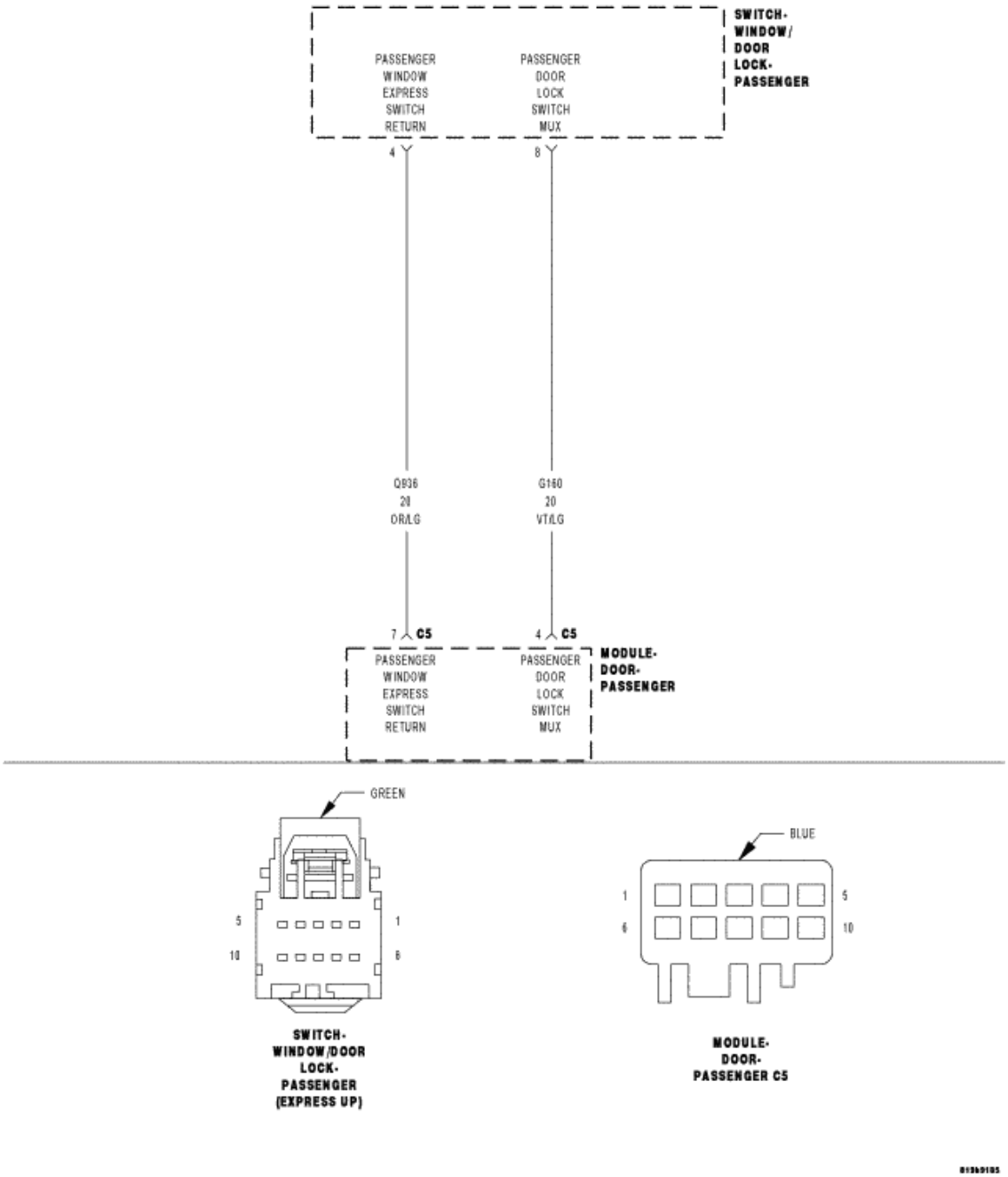


Fig. 14: Passenger Door Lock Switch Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Passenger Door Lock Switch Mux circuit is between 0.8 and 1.5 volts for over 30 seconds.

Possible Causes
(G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO GROUND
(G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (Q936) PASSENGER WINDOW EXPRESS SWITCH RETURN CIRCUIT
DOOR LOCK SWITCH SHORT TO GROUND
PASSENGER DOOR MODULE

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

With the scan tool, record and erase DTC's

Operate the Passenger Door Lock Switch in all positions several times.

Turn the ignition on and wait 30 seconds.

With the scan tool, read DTC's.

Does the scan tool display B1808-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK LOCK?

Yes

Go to 2).

No

The conditions that caused this code to set are not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors.

Perform **BODY VERIFICATION TEST - VER 1** .

2) DOOR LOCK SWITCH SHORTED

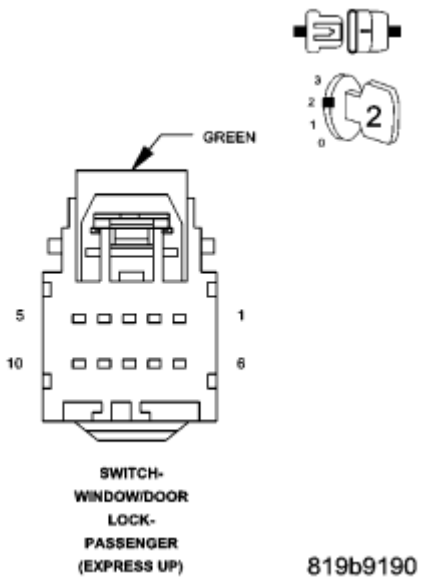


Fig. 15: Passenger Window/Door Lock Switch Connector
Courtesy of CHRYSLER LLC

With the scan tool, erase DTC's.

Disconnect the Passenger Window/Door Lock Switch connector.

With the scan tool, read DTC's.

Does the scan tool display B1808-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK LOCK?

No

Replace the Passenger Window/Door Lock Switch.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to 3).

3) (G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO GROUND

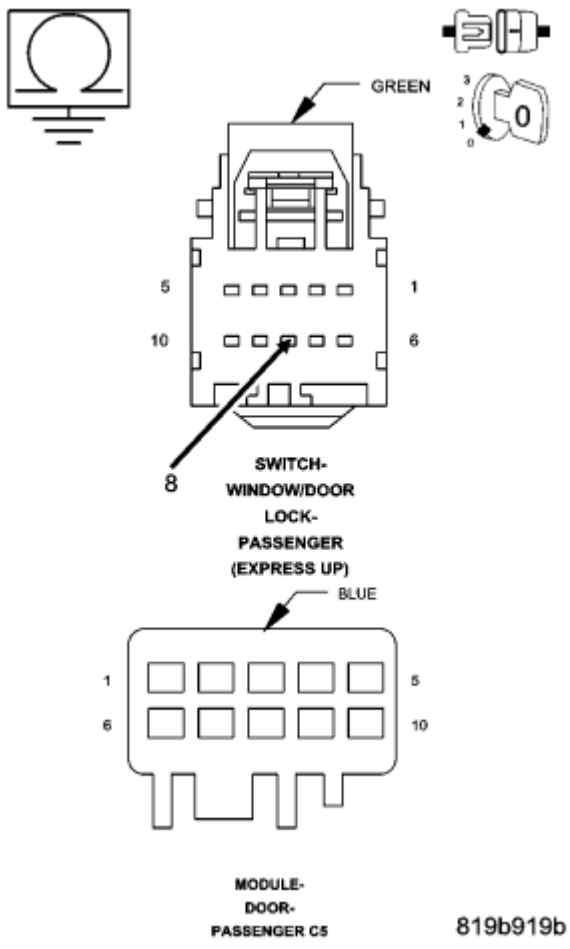


Fig. 16: Measuring Resistance Between Ground And (G160) Passenger Door Lock Switch Mux Circuit In Passenger Window/Door Lock Switch Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the Passenger Door Module C5 connector.

Measure the resistance between ground and the (G160) Passenger Door Lock Switch Mux circuit in the Passenger Window/Door Lock Switch connector.

Is the resistance below 10,000.0 ohms?

Yes

Repair the (G160) Passenger Door Lock Switch Mux circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 4).

4) (G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO (Q936) PASSENGER WINDOW EXPRESS SWITCH RETURN CIRCUIT

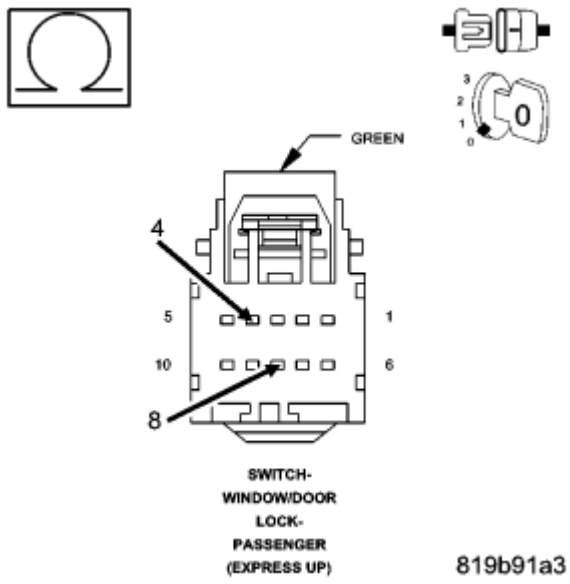


Fig. 17: Measuring Resistance Between (G160) Passenger Door Lock Switch Mux Circuit And (Q936) Passenger Window Express Switch Return Circuit
Courtesy of CHRYSLER LLC

Measure the resistance between the (G160) Passenger Door Lock Switch Mux circuit and the (Q936) Passenger Window Express Switch Return circuit.

Is the resistance below 10,000.0 ohms?

Yes

Repair the (G160) Passenger Door Lock Switch Mux circuit for a short to the (Q936) Passenger Window Express Switch Return circuit.

Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Passenger Door Module in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .

B186F - ALL DOOR SECONDARY LOCK CONTROL CIRCUIT LOW - TIPM

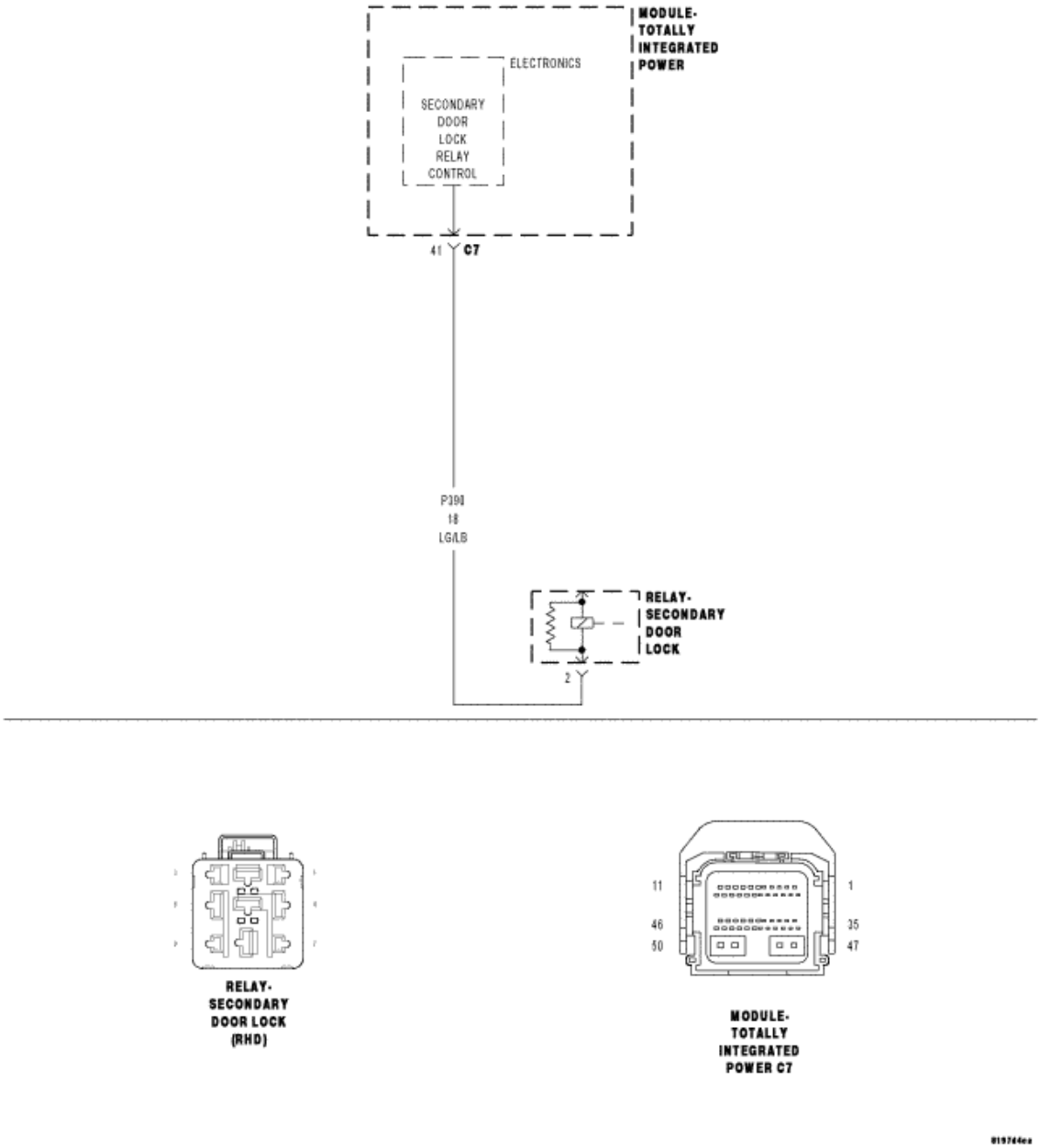


Fig. 18: Secondary Door Lock Relay Control Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

At all times.

Set Condition:

The TIPM detects a low circuit on the Secondary Door Lock Relay Control circuit even though it is not attempting to lock the doors for more than 5 seconds.

Possible Causes
RELAY OPEN OR SHORTED
(P390) SECONDARY DOOR LOCK RELAY CONTROL CIRCUIT SHORT TO GROUND
(P390) SECONDARY DOOR LOCK RELAY CONTROL CIRCUIT OPEN
TOTALLY INTEGRATED POWER MODULE (TIPM)

This test is only for Right Hand Drive (RHD) vehicles.

Diagnostic Test

1) CHECK TROUBLE CODE

Turn the ignition on.

Record all trouble codes.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B186F-ALL DOOR SECONDARY LOCK CONTROL CIRCUIT LOW?

Yes

Go to 2).

No

Problem is intermittent and not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors and repair as necessary. Ensure the relay is completely plugged in.

Perform **BODY VERIFICATION TEST - VER 1** .

2) CHECK FOR RELAY OPEN OR SHORTED

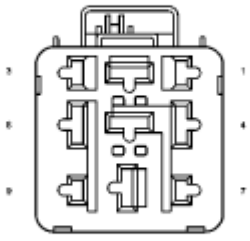


Fig. 19: Secondary Door Lock Relay
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Lock Relay from the I.P. End Bracket (behind the right kick panel).

Install a substitute relay in place of the Secondary Door Lock Relay.

Turn the ignition on.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B186F-ALL DOOR SECONDARY LOCK CONTROL CIRCUIT LOW?

Yes

Go to 3).

No

Replace the original relay.

Perform **BODY VERIFICATION TEST - VER 1** .

3) CHECK THE (P390) SECONDARY DOOR LOCK RELAY CONTROL CIRCUIT FOR A SHORT TO GROUND

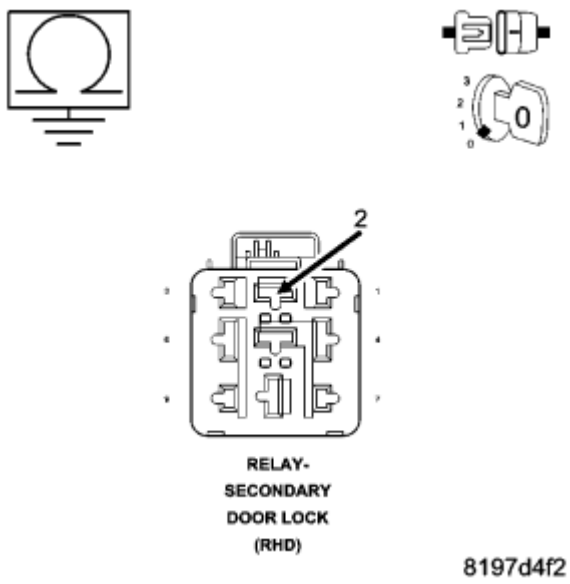


Fig. 20: Measuring Resistance Between Ground And (P390) Secondary Door Lock Relay Control Circuit In Relay Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Lock Relay.

Disconnect the TIPM C7 connector.

Measure the resistance between ground and the (P390) Secondary Door Lock Relay Control circuit in the relay connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (P390) Secondary Door Lock Relay Control circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 4).

4) CHECK THE (P390) SECONDARY DOOR LOCK RELAY CONTROL CIRCUIT FOR AN OPEN

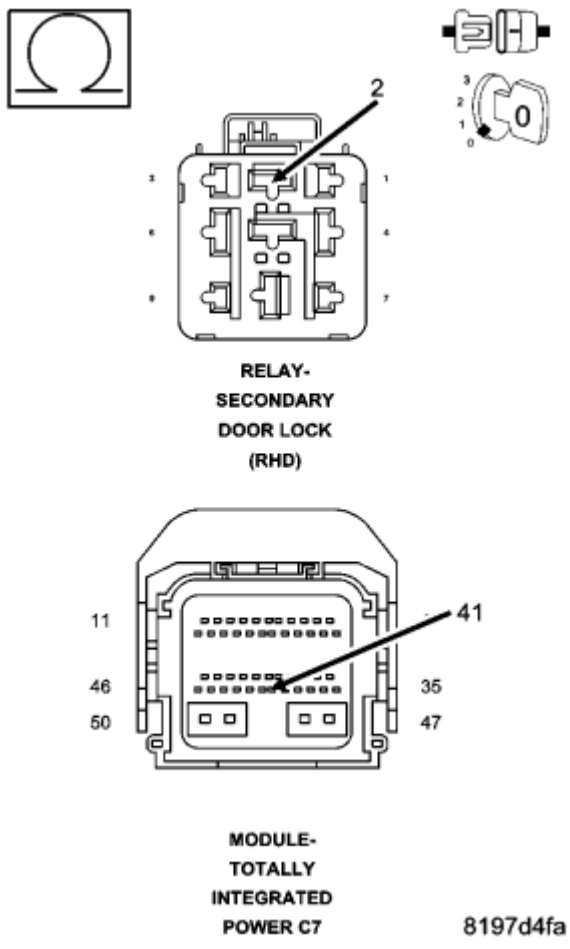


Fig. 21: Measuring Resistance Of (P390) Secondary Door Lock Relay Control Circuit Between Relay Connector And TIPM C7 Connector
Courtesy of CHRYSLER LLC

Measure the resistance of the (P390) Secondary Door Lock Relay Control circuit between the Relay connector and the TIPM C7 connector.

Is the resistance below 2.0 ohms?

Yes

Replace the Totally Integrated Power Module in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Repair the (P390) Secondary Door Lock Relay Control circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

B1870 - ALL DOOR SECONDARY LOCK CONTROL CIRCUIT HIGH - TIPM

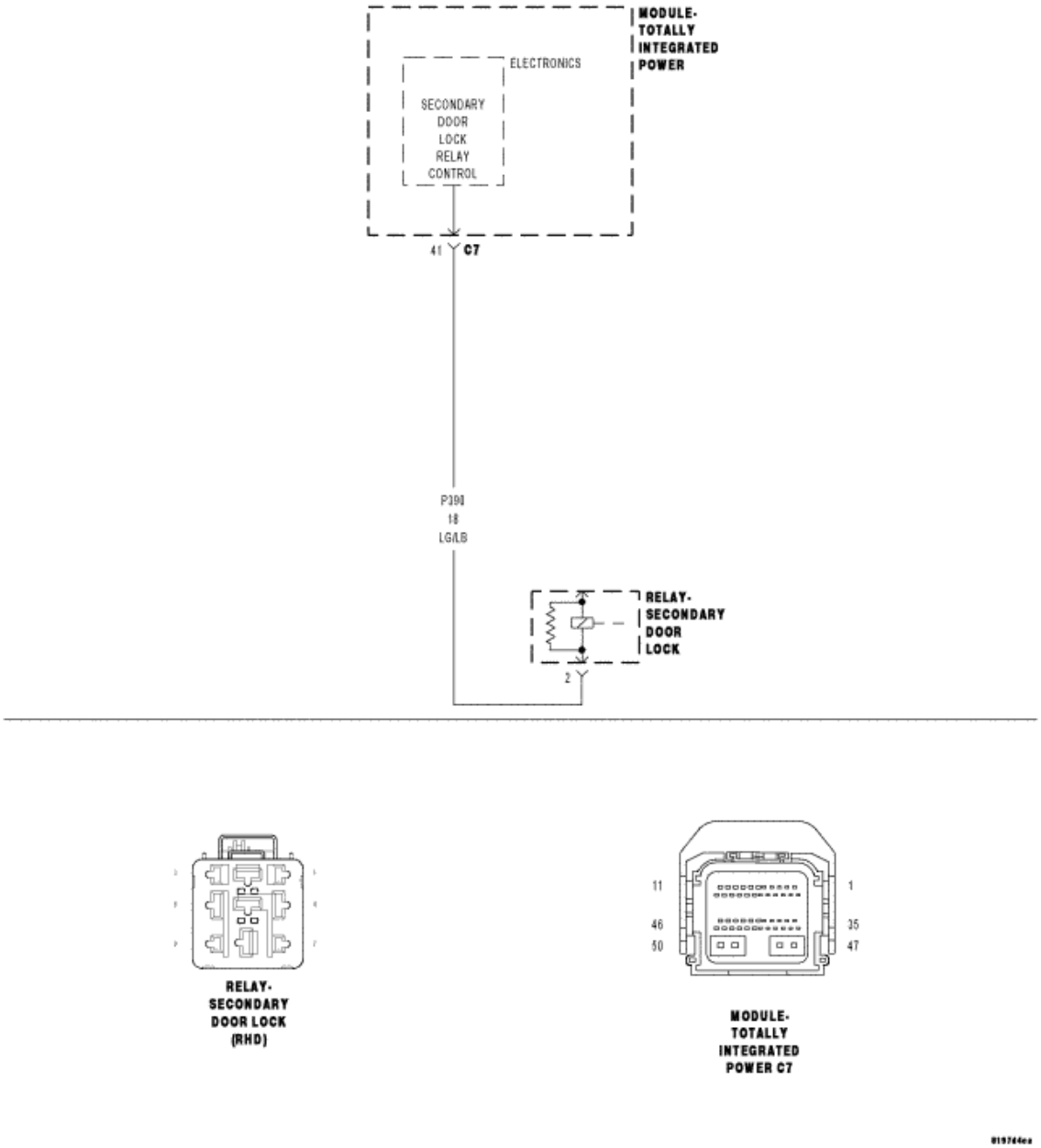


Fig. 22: Secondary Door Lock Relay Control Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

At all times.

Set Condition:

The TIPM detects a high circuit on the Secondary Door Lock Relay Control circuit even though it is not attempting to lock the doors for more than 5 seconds.

Possible Causes
RELAY SHORTED (P390) SECONDARY DOOR LOCK RELAY CONTROL CIRCUIT SHORT TO VOLTAGE TOTALLY INTEGRATED POWER MODULE (TIPM)

This test is only for Right Hand Drive (RHD) vehicles.

Diagnostic Test

1) CHECK TROUBLE CODE

Turn the ignition on.

Record all trouble codes.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B1870-ALL DOOR SECONDARY LOCK CONTROL CIRCUIT HIGH?

Yes

Go to 2).

No

Problem is intermittent and not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors and repair as necessary. Ensure the relay is completely plugged in.

Perform **BODY VERIFICATION TEST - VER 1** .

2) CHECK FOR RELAY SHORTED

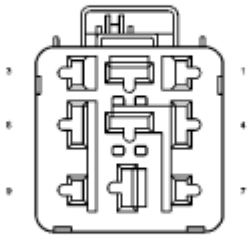


Fig. 23: Secondary Door Lock Relay
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Lock Relay from the I.P. End Bracket (behind the right kick panel).

Install a substitute relay in place of the Secondary Door Lock Relay.

Turn the ignition on.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B1870-ALL DOOR SECONDARY LOCK CONTROL CIRCUIT HIGH?

Yes

Go to 3).

No

Replace the original relay.

Perform **BODY VERIFICATION TEST - VER 1** .

3) CHECK THE (P390) SECONDARY DOOR LOCK RELAY CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

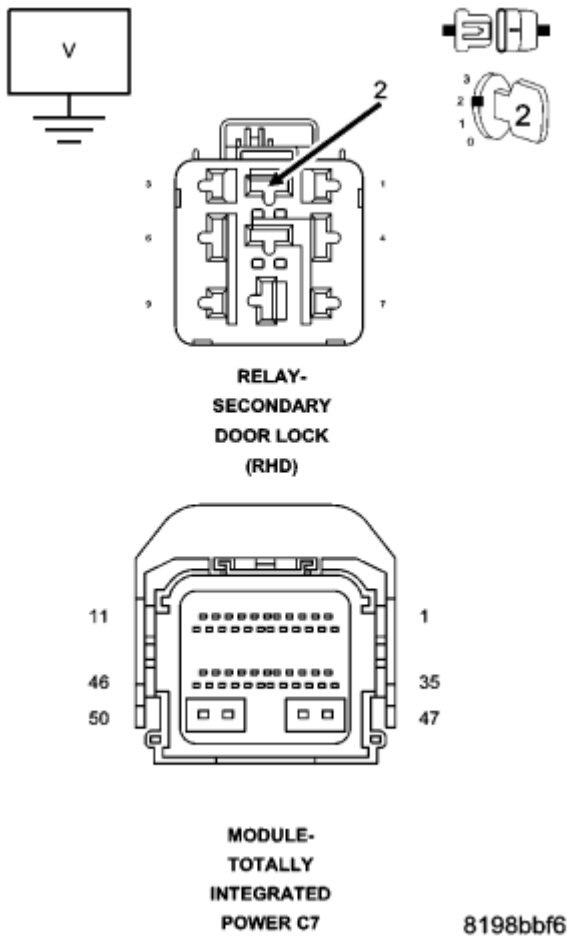


Fig. 24: Measuring Voltage Between Ground And (P390) Secondary Door Lock Relay Control Circuit In Relay Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Lock Relay.

Disconnect the TIPM C7 connector.

Turn the ignition on.

Measure the voltage between ground and the (P390) Secondary Door Lock Relay Control circuit in the relay connector.

Is there any voltage present?

Yes

Repair the (P390) Secondary Door Lock Relay Control circuit for a short to voltage.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

B1934-DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK - TIPM

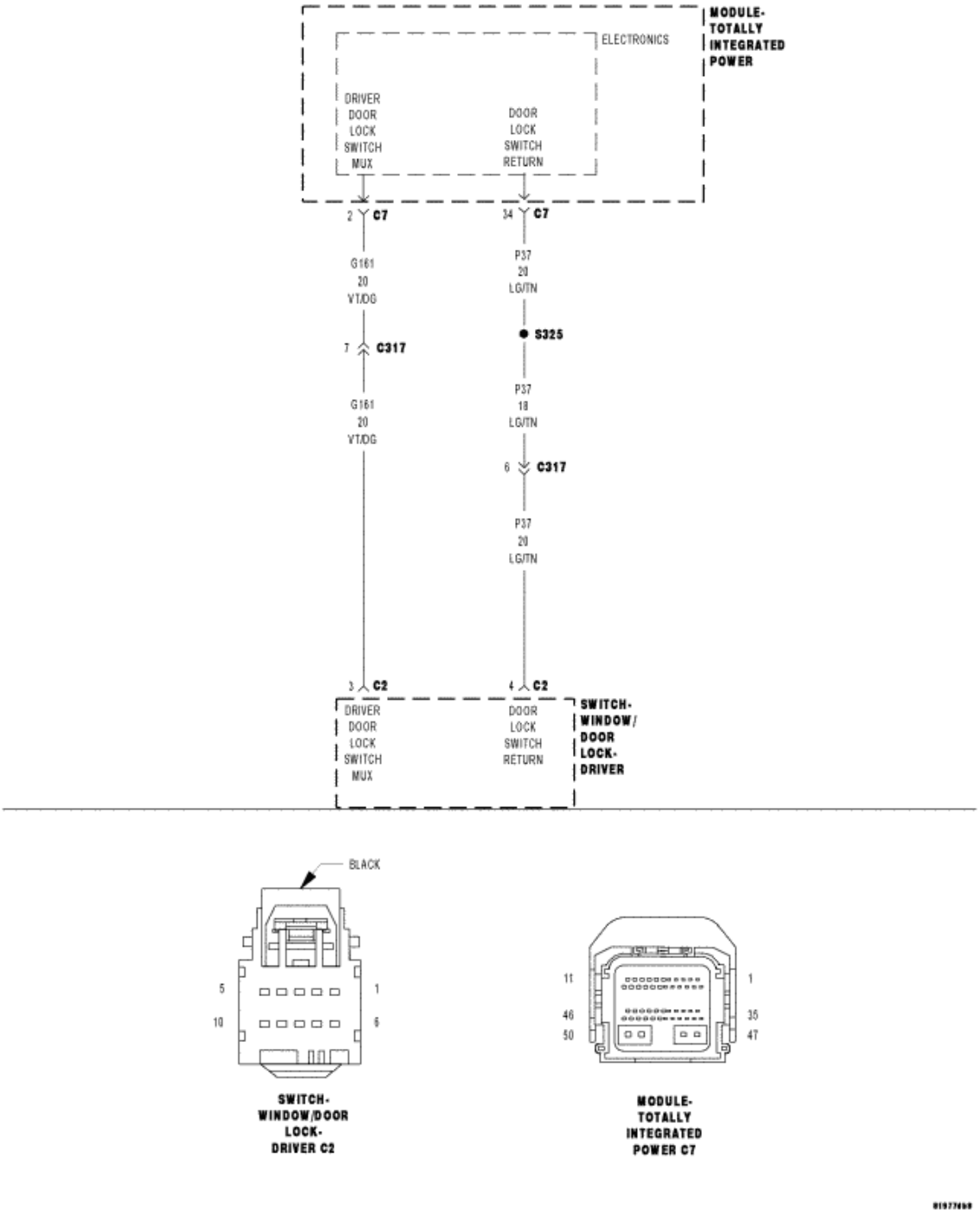


Fig. 25: Driver Door Lock Switch Mux Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously

Set Condition:

When the Driver Door Lock Switch Mux circuit is between 0.8 and 3.5 volts for over 10 seconds.

Possible Causes
(G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT PARTIAL SHORT TO GROUND
(G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT
WINDOW/DOOR LOCK SWITCH
TOTALLY INTEGRATED POWER MODULE (TIPM)

This test is only applicable for vehicles that do not have "Express Up" Power Windows.

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

With the scan tool, record and erase DTC's

Operate the Driver Door Lock Switch in all positions several times.

Cycle the ignition from on to off.

Turn the ignition on.

With the scan tool, read DTC's.

Does the scan tool display B1934-DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK?

Yes

Go to 2).

No

The conditions that caused this code to set are not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors.

Perform **BODY VERIFICATION TEST - VER 1** .

2) DOOR LOCK SWITCH SHORTED

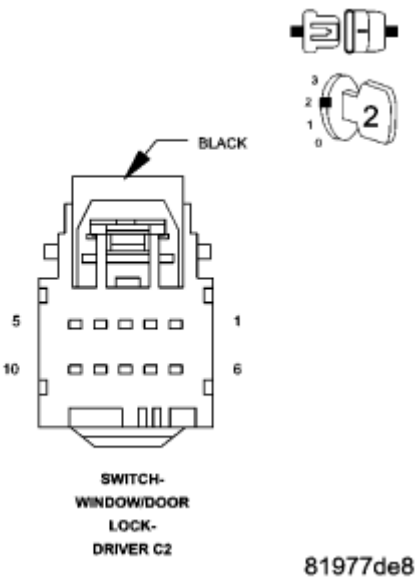


Fig. 26: Driver Window/Door Lock Switch C2 Connector
Courtesy of CHRYSLER LLC

With the scan tool, erase DTC's.

Disconnect the Driver Window/Door Lock Switch C2 connector.

With the scan tool, read DTC's.

Does the scan tool display B1934-DRIVER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK?

No

Replace the Driver Window/Door Lock Switch.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to 3).

3) (G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT PARTIAL SHORT TO GROUND

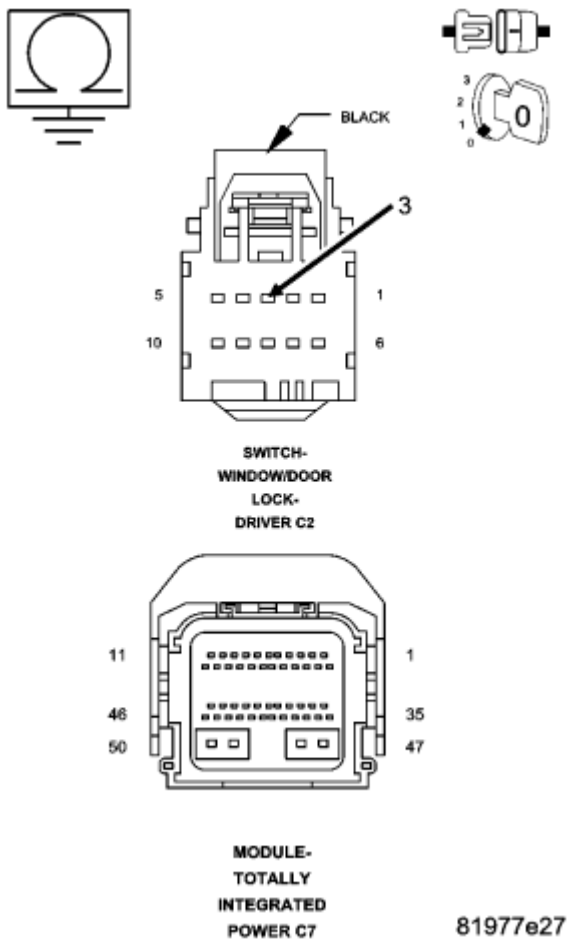


Fig. 27: Measuring Resistance Between Ground And (G161) Driver Door Lock Switch Mux Circuit In Driver Window/Door Lock Switch C2 Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the TIPM C7 connector.

Measure the resistance between ground and the (G161) Driver Door Lock Switch Mux circuit in the Driver Window/Door Lock Switch C2 connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G161) Driver Door Lock Switch Mux circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 4).

4) (G161) DRIVER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT

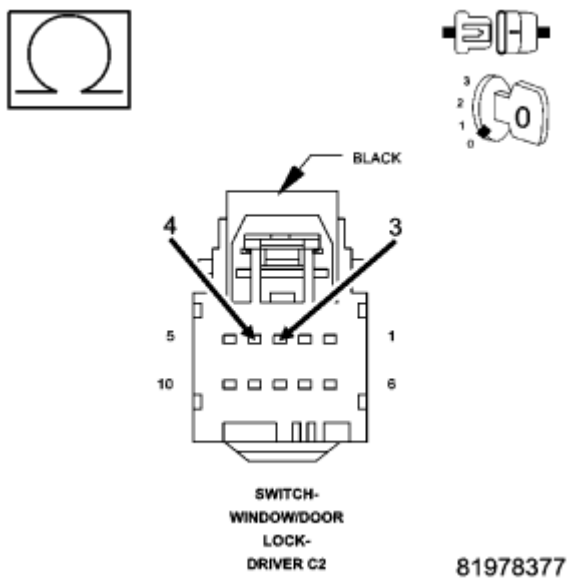


Fig. 28: Measuring Resistance Between (G161) Driver Door Lock Switch Mux Circuit And (P37) Door Lock Switch Return Circuit In Switch C2 Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the TIPM C7 connector.

Measure the resistance between the (G161) Driver Door Lock Switch Mux circuit and the (P37) Door Lock Switch Return circuit in the switch C2 connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G161) Driver Door Lock Switch Mux circuit for a short to the (P37) Door Lock Switch Return circuit.

Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module (TIPM) in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .

B1935-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK - TIPM

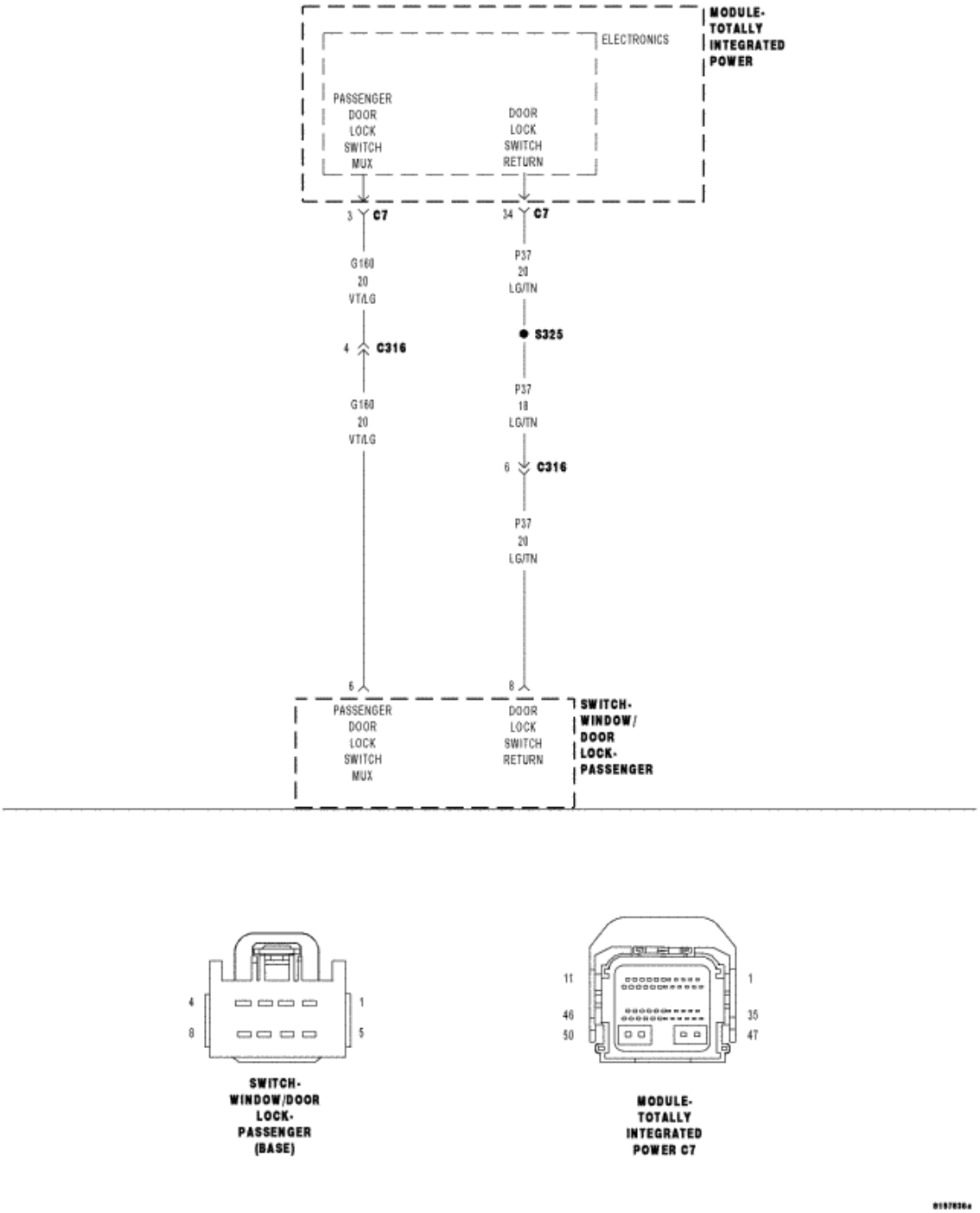


Fig. 29: Passenger Door Lock Switch Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously

Set Condition:

When the Passenger Door Lock Switch Mux circuit is between 0.8 and 3.5 volts for over 10 seconds.

Possible Causes
(G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT PARTIAL SHORT TO GROUND
(G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT
WINDOW/DOOR LOCK SWITCH
TOTALLY INTEGRATED POWER MODULE (TIPM)

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

With the scan tool, record and erase DTC's

Operate the Driver Door Lock Switch in all positions several times.

Cycle the ignition from on to off.

Turn the ignition on.

With the scan tool, read DTC's.

Does the scan tool display B1935-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK?

Yes

Go to 2).

No

The conditions that caused this code to set are not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors.

Perform **BODY VERIFICATION TEST - VER 1** .

2) DOOR LOCK SWITCH SHORTED

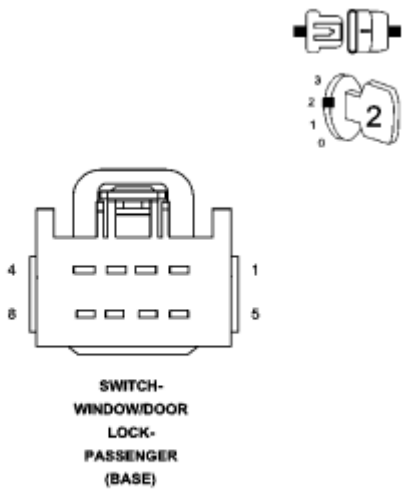


Fig. 30: Passenger Window/Door Lock Switch C2 Connector
Courtesy of CHRYSLER LLC

With the scan tool, erase DTC's.

Disconnect the Passenger Window/Door Lock Switch C2 connector.

With the scan tool, read DTC's.

Does the scan tool display B1935-PASSENGER DOOR LOCK/UNLOCK SWITCH CIRCUIT STUCK?

No

Replace the Passenger Window/Door Lock Switch.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to 3).

3) (G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT PARTIAL SHORT TO GROUND

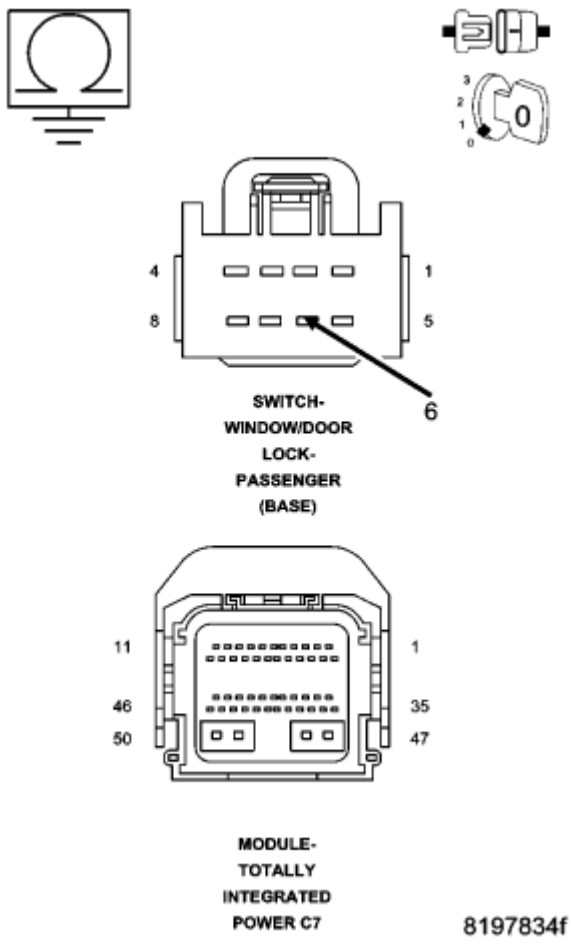


Fig. 31: Measuring Resistance Between Ground And (G160) Passenger Door Lock Switch Mux Circuit
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the TIPM C7 connector.

Measure the resistance between ground and the (G160) Passenger Door Lock Switch Mux circuit.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G160) Passenger Door Lock Switch Mux circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 4).

4) (G160) PASSENGER DOOR LOCK SWITCH MUX CIRCUIT SHORT TO THE (P37) DOOR LOCK SWITCH RETURN CIRCUIT

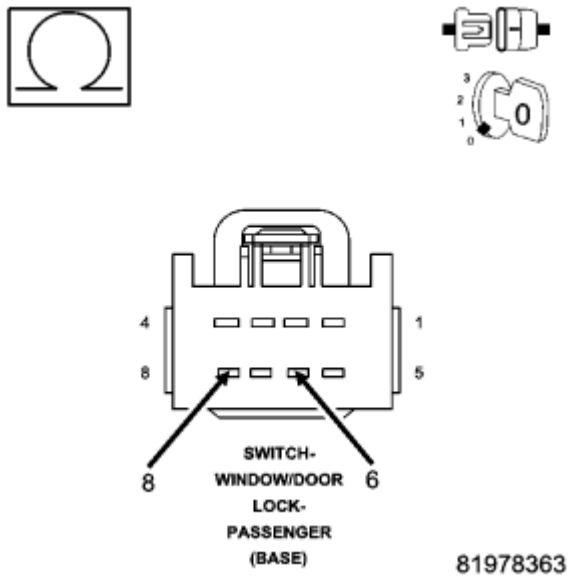


Fig. 32: Measuring Resistance Between (G160) Passenger Door Lock Switch Mux Circuit And (P37) Door Lock Switch Return Circuit In Switch C2 Connector
Courtesy of CHRYSLER LLC

Measure the resistance between the (G160) Passenger Door Lock Switch Mux circuit and the (P37) Door Lock Switch Return circuit in the switch C2 connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (G160) Passenger Door Lock Switch Mux circuit for a short to the (P37) Door Lock Switch Return circuit.

Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module (TIPM) in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .

B198A - ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT LOW - TIPM

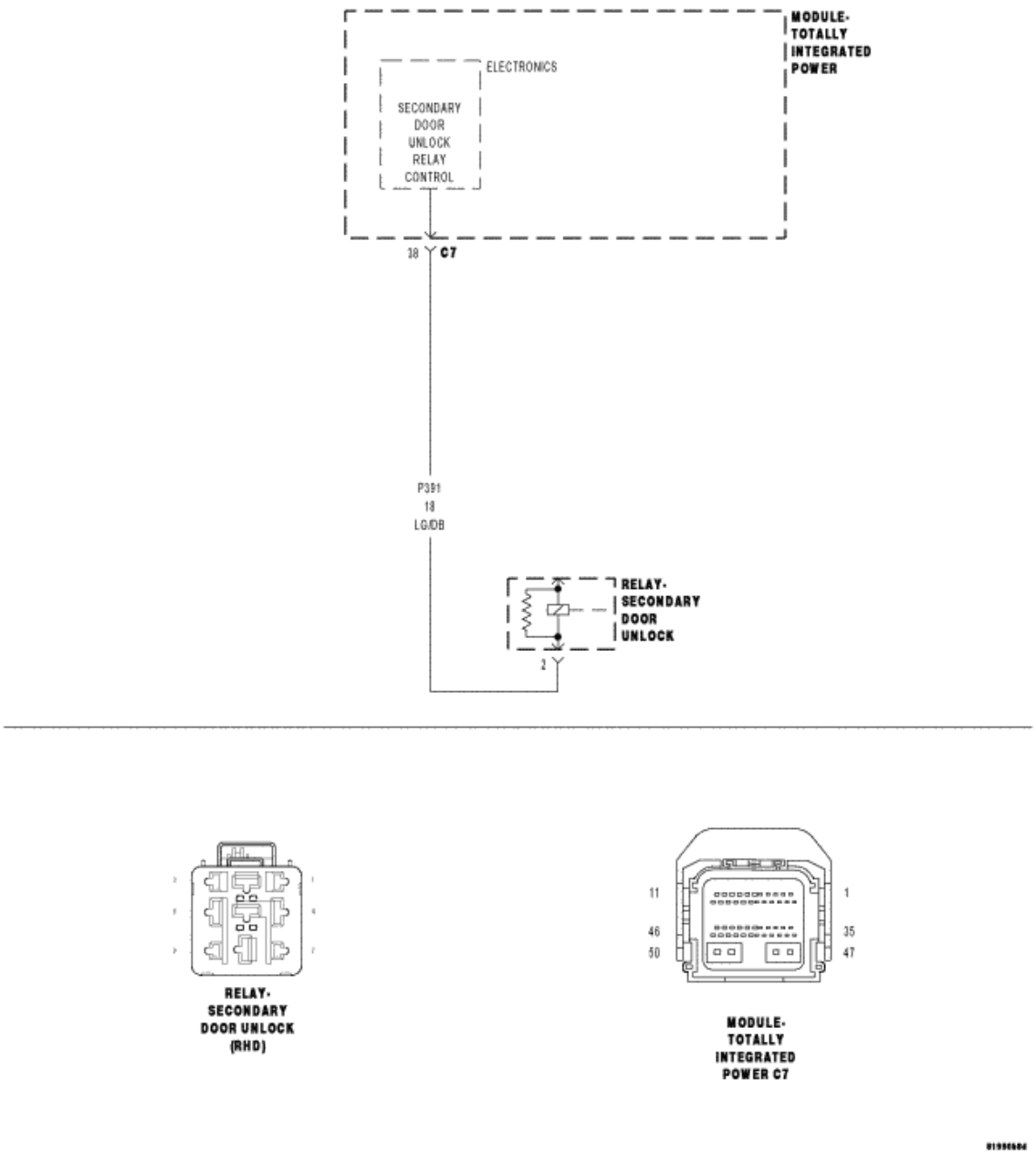


Fig. 33: Secondary Door Unlock Relay Control Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

At all times.

Set Condition:

The TIPM detects a low circuit on the Secondary Door Unlock Relay Control circuit for more than 5 seconds, even though it is not attempting to unlock the doors.

Possible Causes
RELAY OPEN OR SHORTED
(P391) SECONDARY DOOR UNLOCK RELAY CONTROL CIRCUIT SHORT TO GROUND
(P391) SECONDARY DOOR UNLOCK RELAY CONTROL CIRCUIT OPEN
TOTALLY INTEGRATED POWER MODULE (TIPM)

NOTE: This test is only for Right Hand Drive vehicles.

Diagnostic Test

1) CHECK TROUBLE CODE

Turn the ignition on.

Record all trouble codes.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B198A-ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT LOW?

Yes

Go to 2).

No

Problem is intermittent and not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors and repair as necessary. Ensure the relay is completely plugged in.

Perform **BODY VERIFICATION TEST - VER 1** .

2) CHECK FOR RELAY OPEN OR SHORTED

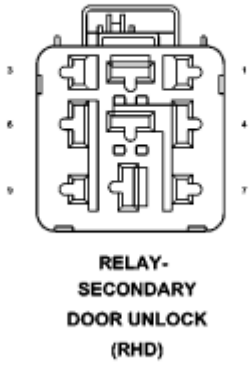


Fig. 34: Secondary Door Unlock Relay
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Unlock Relay from the I.P. End Bracket (behind the right kick panel).

Install a substitute relay in place of the Secondary Door Unlock Relay.

Turn the ignition on.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B198A-ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT LOW?

Yes

Go to 3).

No

Replace the original relay.

Perform **BODY VERIFICATION TEST - VER 1** .

3) CHECK THE (P391) SECONDARY DOOR UNLOCK RELAY CONTROL CIRCUIT FOR A SHORT TO GROUND

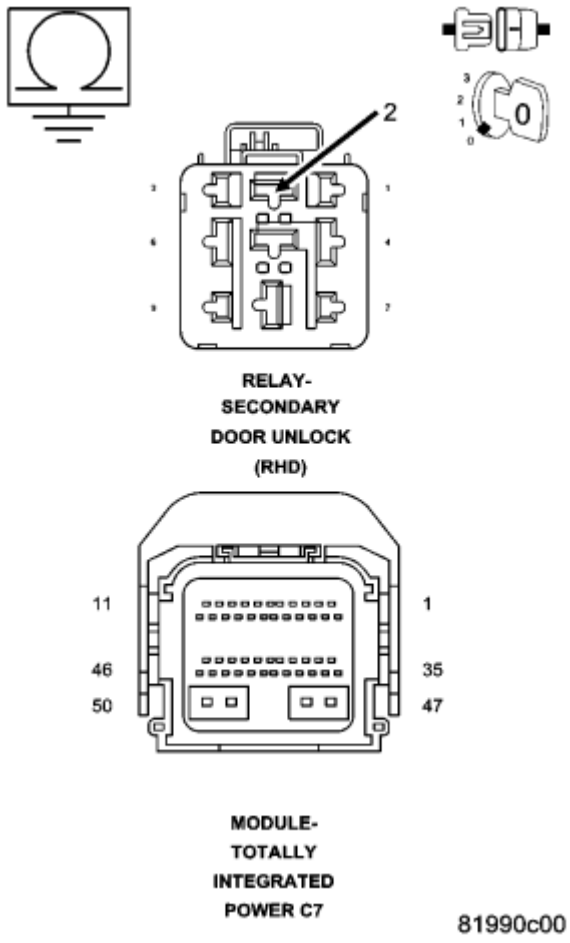


Fig. 35: Measuring Resistance Between Ground And (P391) Secondary Door Unlock Relay Control Circuit In Relay Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Unlock Relay.

Disconnect the TIPM C7 connector.

Measure the resistance between ground and the (P391) Secondary Door Unlock Relay Control circuit in the relay connector.

Is the resistance below 1,000.0 ohms?

Yes

Repair the (P391) Secondary Door Unlock Relay Control circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to 4).

4) CHECK THE (P391) SECONDARY DOOR LOCK RELAY CONTROL CIRCUIT FOR AN OPEN

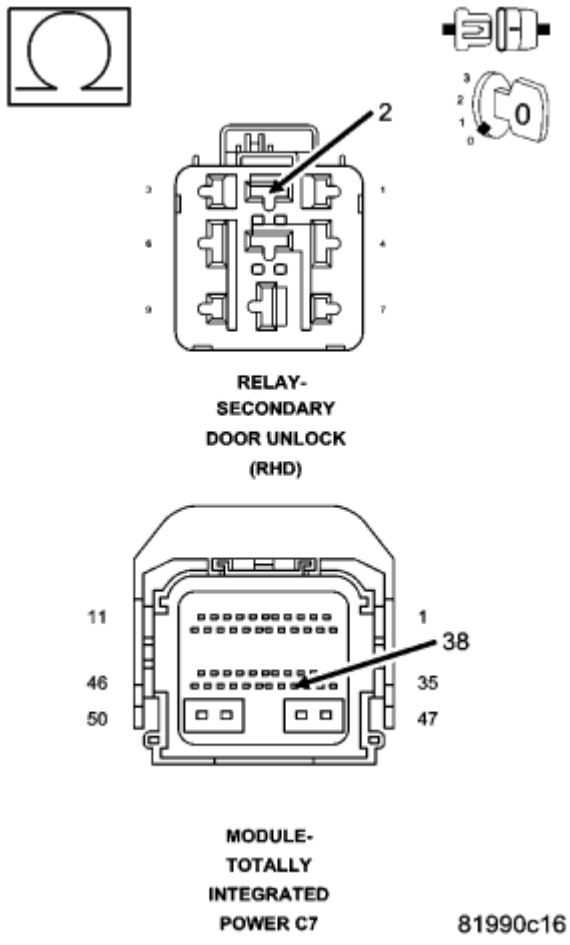


Fig. 36: Measuring Resistance Of (P391) Secondary Door Unlock Relay Control Circuit Between Relay Connector And TIPM C7 Connector
Courtesy of CHRYSLER LLC

Measure the resistance of the (P391) Secondary Door Unlock Relay Control circuit between the Relay connector and the TIPM C7 connector.

Is the resistance below 2.0 ohms?

Yes

Replace the Totally Integrated Power Module in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Repair the (P391) Secondary Door Unlock Relay Control circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

B198B - ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT HIGH - TIPM

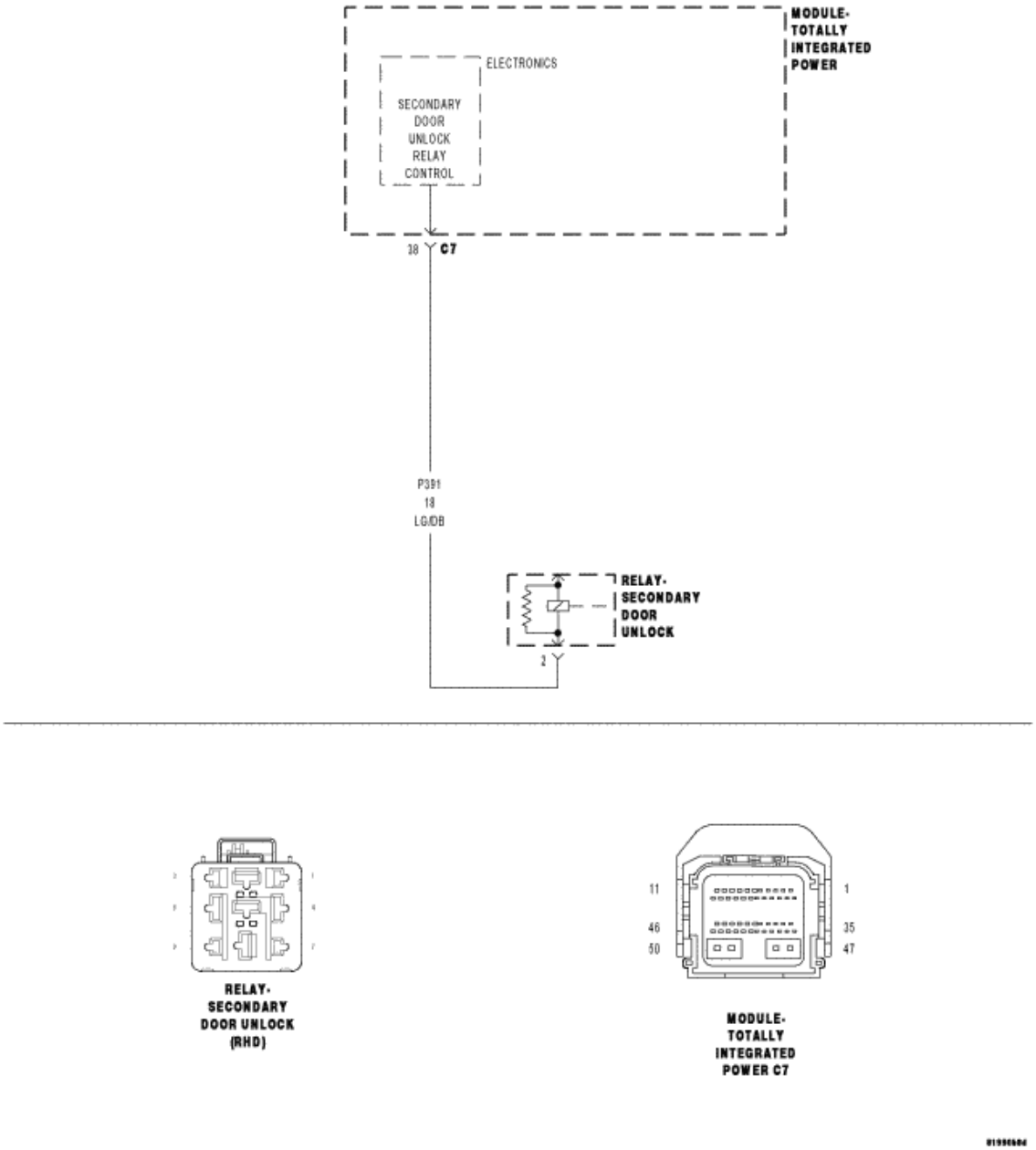


Fig. 37: Secondary Door Unlock Relay Control Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

At all times.

Set Condition:

The TIPM detects a high circuit on the Secondary Door Unlock Relay Control circuit for more than 5 seconds, even though it is not attempting to unlock the doors.

Possible Causes
RELAY SHORTED (P391) SECONDARY DOOR UNLOCK RELAY CONTROL CIRCUIT SHORT TO VOLTAGE TOTALLY INTEGRATED POWER MODULE (TIPM)

NOTE: This test is only for Right Hand Drive vehicles.

Diagnostic Test

1) CHECK TROUBLE CODE

Turn the ignition on.

Record all trouble codes.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B109B-ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT HIGH?

Yes

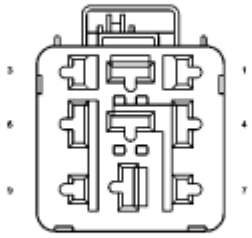
Go to 2).

No

Problem is intermittent and not present at this time. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors and repair as necessary. Ensure the relay is completely plugged in.

Perform **BODY VERIFICATION TEST - VER 1** .

2) CHECK FOR RELAY SHORTED



81990bf0

Fig. 38: Secondary Door Unlock Relay
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Unlock Relay from the I.P. End Bracket (behind the right kick panel).

Install a substitute relay in place of the Secondary Door Unlock Relay.

Turn the ignition on.

With the scan tool, erase DTCs.

Turn ignition off and remove the key.

Lock all doors and wait 2 minutes.

Turn the ignition on.

With the scan tool, read DTCs.

Does the scan tool display B198B-ALL DOOR SECONDARY UNLOCK CONTROL CIRCUIT HIGH?

Yes

Go to 3).

No

Replace the original relay.

Perform **BODY VERIFICATION TEST - VER 1** .

3) CHECK THE (P391) SECONDARY DOOR UNLOCK RELAY CONTROL CIRCUIT FOR A SHORT TO VOLTAGE

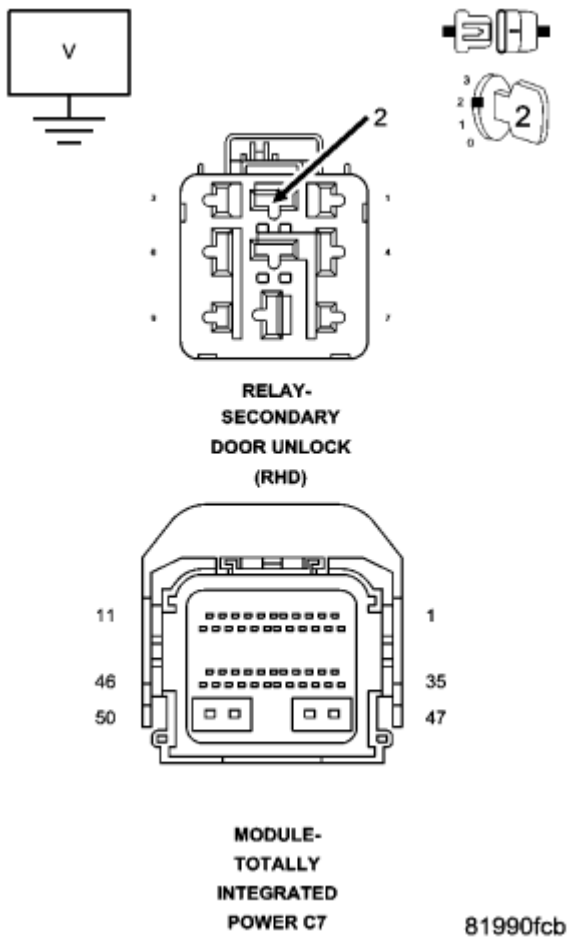


Fig. 39: Measuring Voltage Between Ground And (P391) Secondary Door Unlock Relay Control Circuit In Relay Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Remove the Secondary Door Unlock Relay.

Disconnect the TIPM C7 connector.

Turn the ignition on.

Measure the voltage between ground and the (P391) Secondary Door Unlock Relay Control circuit in the relay connector.

Is there any voltage present?

Yes

Repair the (P391) Secondary Door Unlock Relay Control circuit for a short to voltage.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A08-RKE FOB 1 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A08-RKE FOB 1 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE system to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A09-RKE FOB 2 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A09-RKE FOB 2 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A0A-RKE FOB 3 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A08-RKE FOB 1 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE system to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A0B-RKE FOB 4 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A08-RKE FOB 1 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE system to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A0C-RKE FOB 5 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A08-RKE FOB 1 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE system to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A0D-RKE FOB 6 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A08-RKE FOB 1 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE system to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A0E-RKE FOB 7 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A08-RKE FOB 1 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE system to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A0F-RKE FOB 8 PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

Scrambled messages to the wireless control module from the transmitter.

NOTE: The most probable cause for this code to set is if the Wireless Control Module (WCM) senses over 150 presses from the RKE transmitter, when it is out of range.

Possible Causes
EXCESSIVE PRESSES FROM TRANSMITTER WHEN OUT OF RANGE
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Put the key in the ignition and turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A08-RKE FOB 1 PERFORMANCE?

Yes

Replace the RKE transmitter and program in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time. Inform the owner of the most probable cause for this code to set and therefore cause the RKE system to be inoperative.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A10-RKE FOB 1 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A10-RKE FOB 1 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.

Perform **BODY VERIFICATION TEST - VER 1** .

B1A11-RKE FOB 2 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A11-RKE FOB 2 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A12-RKE FOB 3 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A12-RKE FOB 3 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A13-RKE FOB 4 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A13-RKE FOB 4 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A14-RKE FOB 5 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A14-RKE FOB 5 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A15-RKE FOB 6 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A15-RKE FOB 6 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A16-RKE FOB 7 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY
RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A16-RKE FOB 7 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A17-RKE FOB 8 BATTERY LOW

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE transmitter signal is not as strong as it ought to be, this code will set.

Possible Causes
LOW BATTERY RKE TRANSMITTER

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Operate the RKE transmitter in all positions several times.

With the scan tool, read DTC's.

Does the scan tool display B1A17-RKE FOB 8 BATTERY LOW?

Yes

Replace the RKE transmitter battery and retry the system. If the DTC returns, replace and program the RKE transmitter in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

No

The conditions that caused this code to set are not present at this time.
Perform **BODY VERIFICATION TEST - VER 1** .

B1A23-RKE RECEIVER PERFORMANCE

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

When the Wireless Control Module senses that the RKE signal is jammed, this code will set.

Possible Causes
EXTERNAL ENVIRONMENT

Diagnostic Test

1) TEST FOR INTERMITTENT CONDITION

Turn the ignition on.

With the scan tool, record and erase DTC's

Turn the ignition off.

Operate the RKE transmitter in all positions several times.

Turn the ignition on.

With the scan tool, read DTC's.

Are there any door lock related trouble codes present or is the RKE inoperative?

Yes

Refer to the symptom list for problems related to Power Locks.

No

The conditions that caused this code to set are not present at this time. This DTC is set when the vehicle is parked in a location that is affected by external environmental conditions. Suggest to the customer that they park in a slightly different location from where the RKE was inoperable.

***DRIVER DOOR LOCK INOPERATIVE**

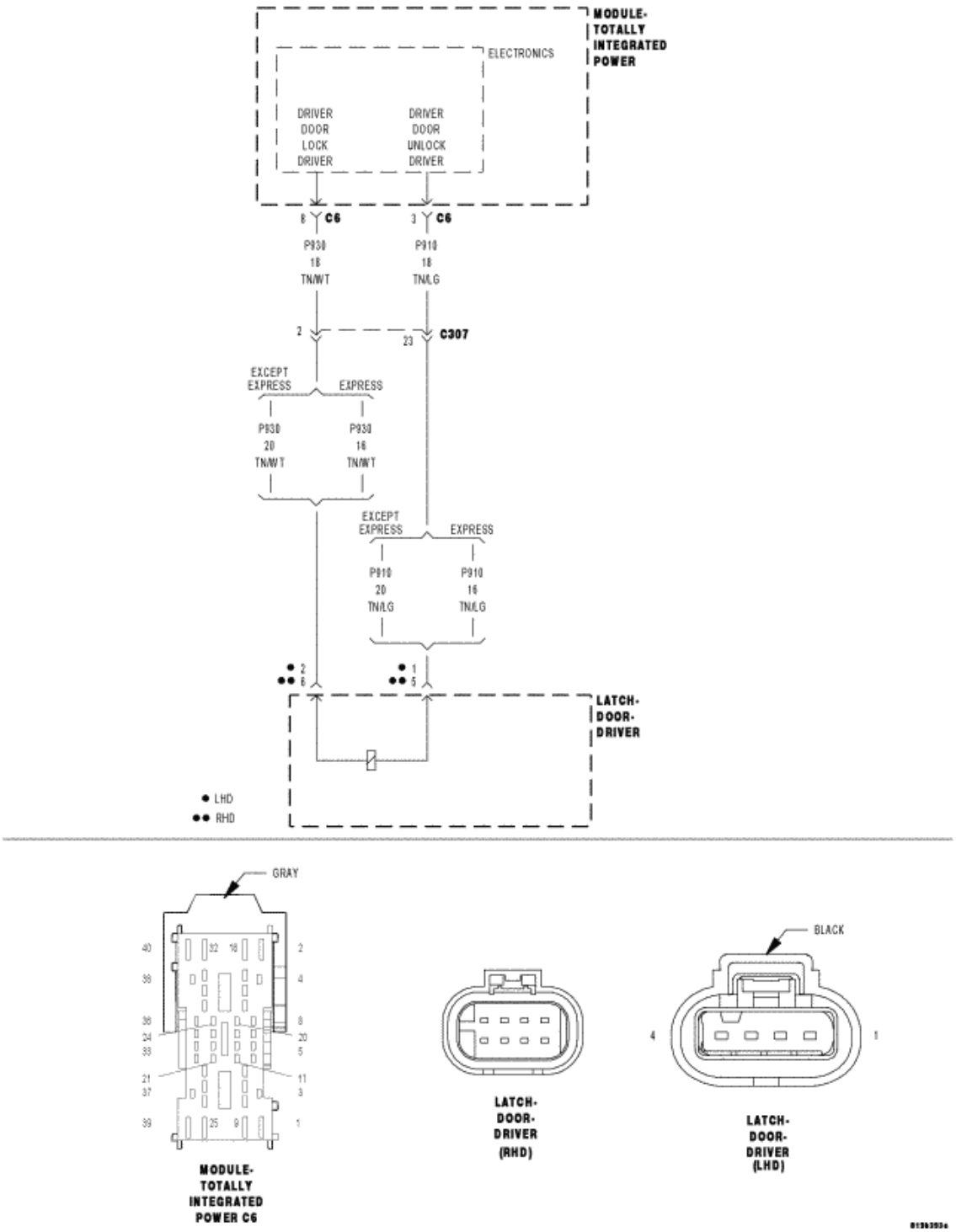


Fig. 40: Driver Door Lock Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

Possible Causes
(P930) DRIVER DOOR LOCK DRIVER CIRCUIT OPEN
(P930) DRIVER DOOR LOCK DRIVER CIRCUIT SHORT TO GROUND
(P910) DRIVER DOOR UNLOCK DRIVER CIRCUIT OPEN
(P910) DRIVER DOOR UNLOCK DRIVER CIRCUIT SHORT TO GROUND
DRIVER DOOR LATCH
TOTALLY INTEGRATED POWER MODULE (TIPM)

NOTE: The latch graphics in this test are for a Left Hand Drive (LHD) vehicle. For a Right Hand Drive (RHD) vehicle, refer to the schematic for the latch connector cavities.

Diagnostic Test

1) DRIVER DOOR LATCH INOPERATIVE

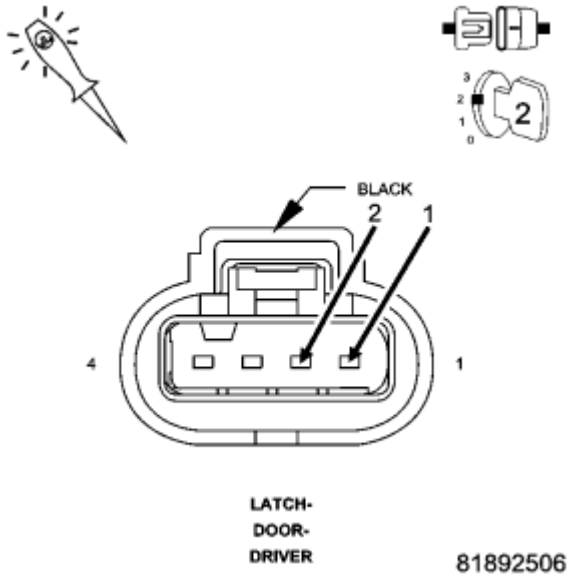


Fig. 41: Connecting Test Light Between (P930) Driver Door Lock Driver Circuit And (P910) Driver Door Unlock Driver Circuit
Courtesy of CHRYSLER LLC

Disconnect the Driver Door Latch connector.

Connect a test light between the (P930) Driver Door Lock Driver circuit and the (P910) Driver Door Unlock Driver circuit.

Close the front doors or trip the door latches to the closed position.

Operate the door locks in both positions and observe the test light.

Does the test light illuminate brightly for approximately 300 ms. when the door locks are actuated?

Yes

Replace the Driver Door Latch.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to step 2).

2) CHECK (P910) DRIVER DOOR UNLOCK DRIVER CIRCUIT OPEN

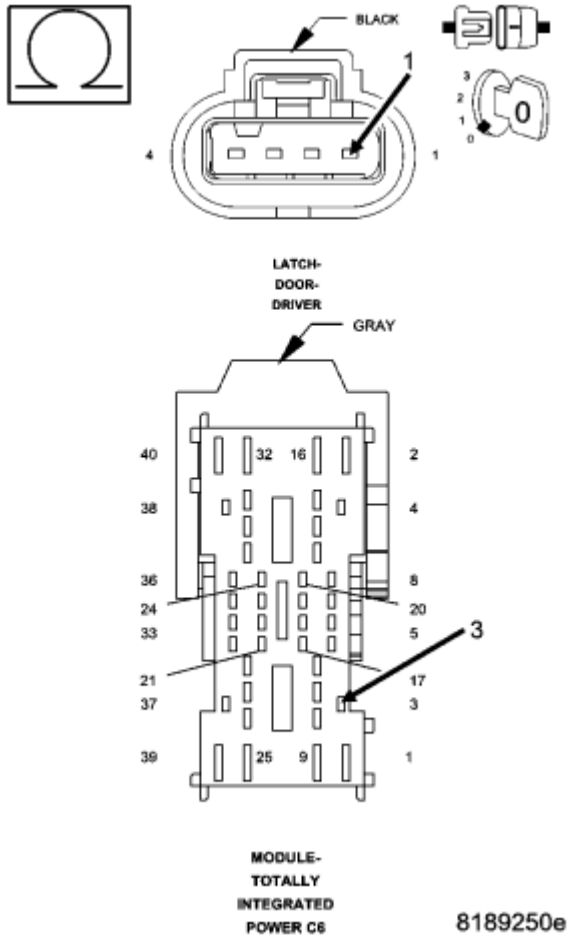


Fig. 42: Measuring Resistance Of (P910) Driver Door Unlock Driver Circuit Between Latch Connector And TIPM C6 Connector
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the TIPM C6 connector.

Measure the resistance of the (P910) Driver Door Unlock Driver circuit between the Latch connector and the TIPM C6 connector.

Is the resistance below 2.0 ohms?

No

Repair the (P910) Driver Door Unlock Driver circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to step 3).

3) CHECK (P910) DRIVER DOOR UNLOCK DRIVER CIRCUIT SHORT TO GROUND

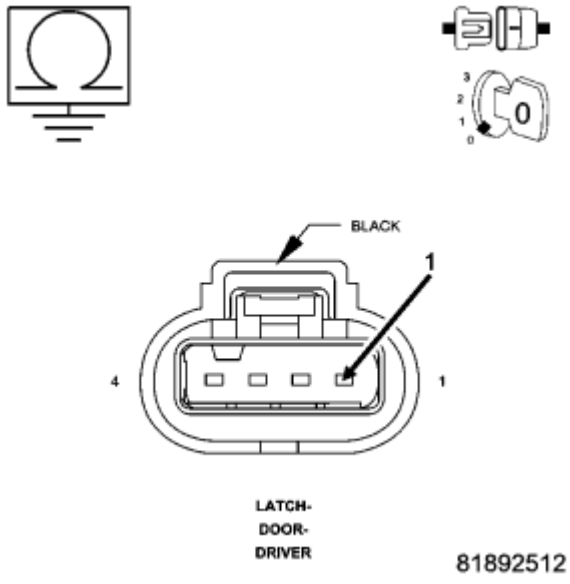


Fig. 43: Measuring Resistance Between Ground And (P910) Driver Door Unlock Driver Circuit
Courtesy of CHRYSLER LLC

Measure the resistance between Ground and the (P910) Driver Door Unlock Driver circuit.

Is the resistance below 1000.0 ohms?

Yes

Repair the (P910) Driver Door Unlock Driver circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to step 4).

4) CHECK (P930) DRIVER DOOR LOCK DRIVER CIRCUIT OPEN

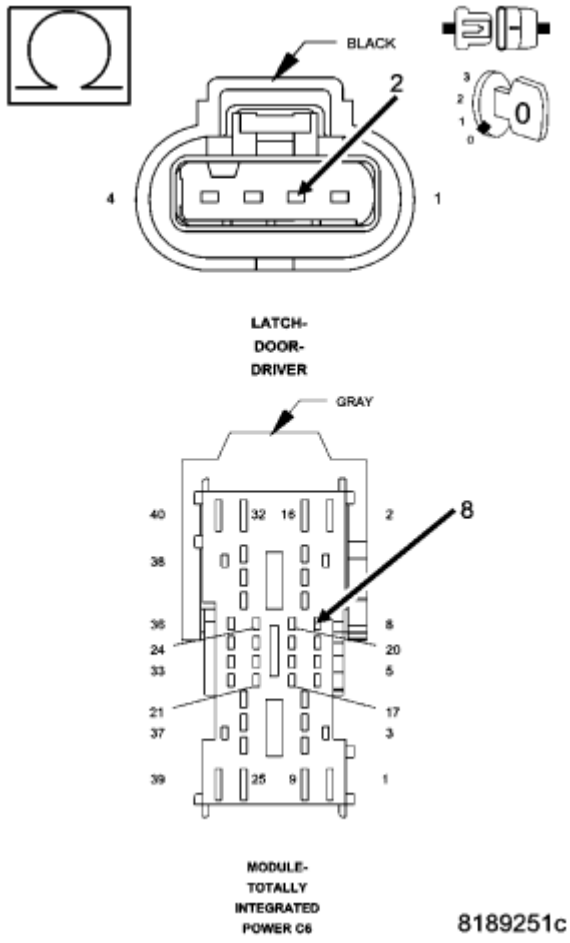


Fig. 44: Measuring Resistance Of (P930) Driver Door Lock Driver Circuit Between TIPM C6 Connector And Driver Door Latch Connector
Courtesy of CHRYSLER LLC

Measure the resistance of the (P930) Driver Door Lock Driver circuit between the TIPM C6 connector and the Driver Door Latch connector.

Is the resistance below 2.0 ohms?

Yes

Go to step 5).

No

Repair the (P930) Driver Door Lock Driver circuit for an open.

Perform **BODY VERIFICATION TEST - VER 1** .

5) CHECK (P930) DRIVER DOOR LOCK DRIVER CIRCUIT SHORT TO GROUND

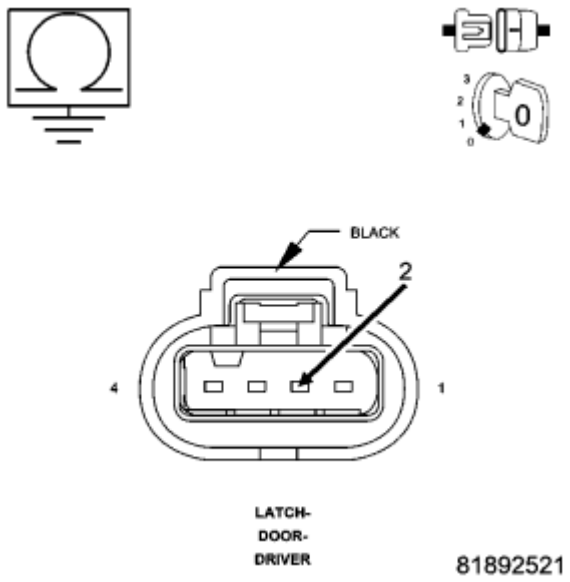


Fig. 45: Measuring Resistance Between Ground And (P930) Driver Door Lock Driver Circuit
Courtesy of CHRYSLER LLC

Measure the resistance between Ground and the (P930) Driver Door Lock Driver circuit.

Is the resistance below 1000.0 ohms?

Yes

Repair the (P930) Driver Door Lock Driver circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

***LIFTGATE LOCK INOPERATIVE**

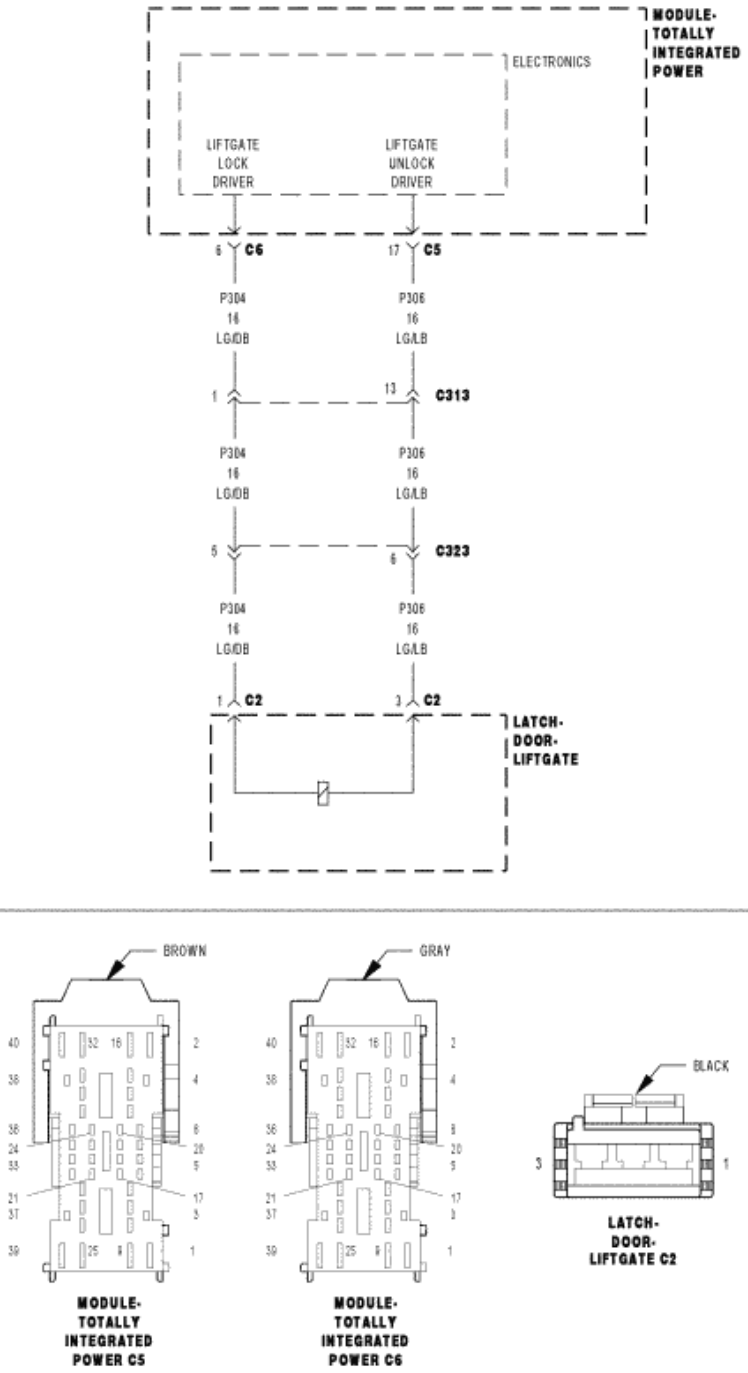


Fig. 46: Liftgate Lock Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

Possible Causes
(P304) TAILGATE (LIFTGATE) LOCK DRIVER CIRCUIT OPEN
(P304) TAILGATE (LIFTGATE) LOCK DRIVER CIRCUIT SHORT TO GROUND
(P306) TAILGATE (LIFTGATE) UNLOCK DRIVER CIRCUIT OPEN
(P306) TAILGATE (LIFTGATE) UNLOCK DRIVER CIRCUIT SHORT TO GROUND
TAILGATE LATCH
TOTALLY INTEGRATED POWER MODULE (TIPM)

Diagnostic Test

1) LIFTGATE LATCH INOPERATIVE

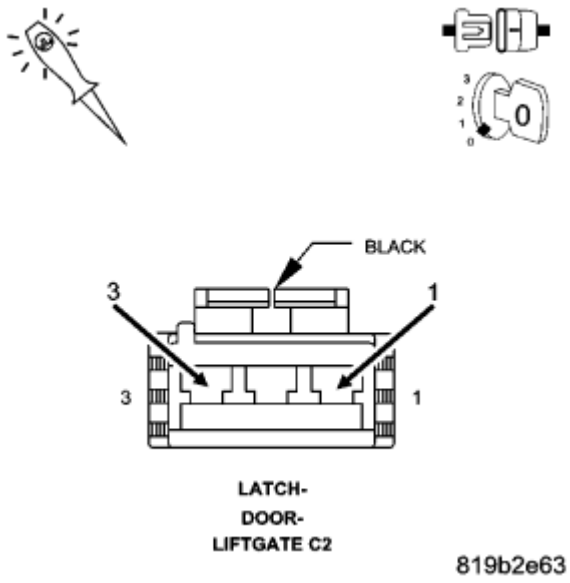


Fig. 47: Connecting Test Light Between (P304) Tailgate Lock Driver Circuit And (P406) Tailgate Unlock Driver Circuit
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the Tailgate Latch connector.

Connect a test light between the (P304) Tailgate Lock Driver circuit and the (P406) Tailgate Unlock Driver circuit.

Close the front doors or trip the front door latches to the closed position.

Operate the door locks in both positions and observe the test light.

Does the test light illuminate brightly for approximately 300 ms. when the door locks are actuated?

Yes

Replace the Liftgate Latch.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to step 2).

2) (P306) TAILGATE UNLOCK DRIVER CIRCUIT OPEN

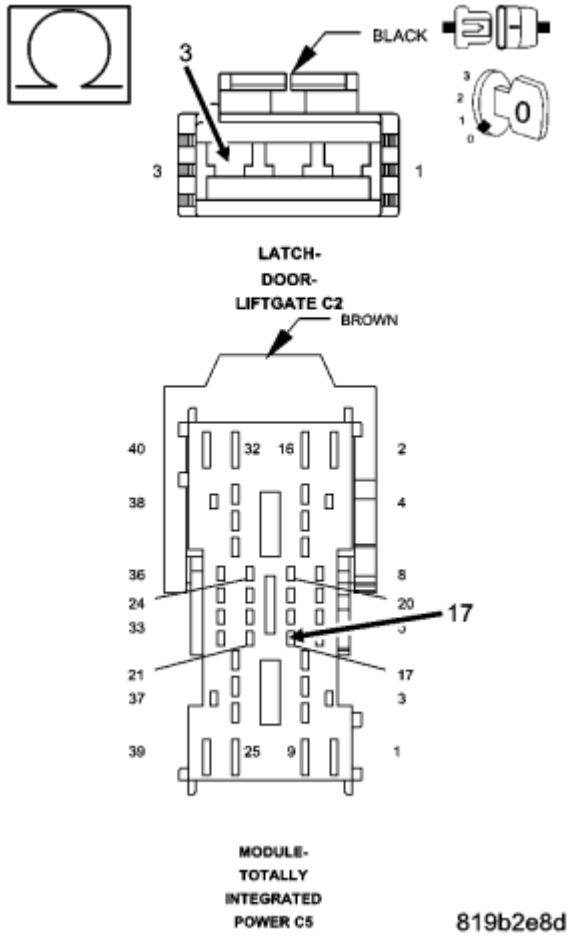


Fig. 48: Measuring Resistance Of (P306) Tailgate Unlock Driver Circuit Between Latch Connector And TIPM C5 Connector
Courtesy of CHRYSLER LLC

Disconnect the TIPM C5 connector.

Measure the resistance of the (P306) Tailgate Unlock Driver circuit between the Latch connector and the TIPM C5 connector.

Is the resistance below 2.0 ohms?

No

Repair the (P306) Tailgate Unlock Driver circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to step 3).

3) (P306) TAILGATE UNLOCK DRIVER CIRCUIT SHORT TO GROUND

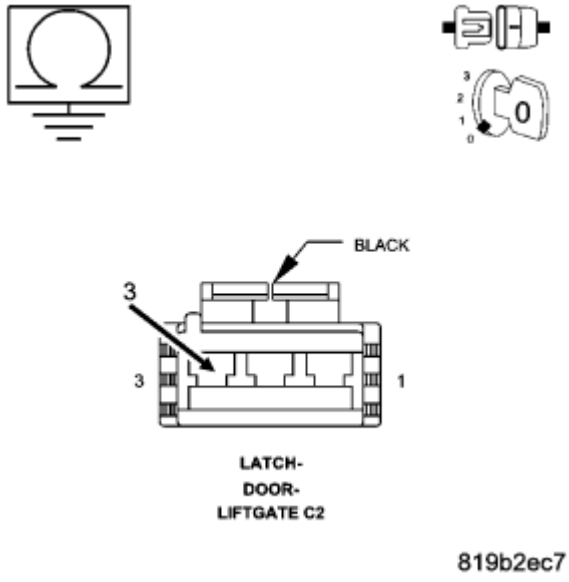


Fig. 49: Measuring Resistance Between Ground And (P306) Tailgate Unlock Driver Circuit
Courtesy of CHRYSLER LLC

Measure the resistance between Ground and the (P306) Tailgate Unlock Driver circuit.

Is the resistance below 1000.0 ohms?

Yes

Repair the (P306) Tailgate Unlock Driver circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to step 4).

4) (P304) TAILGATE LOCK DRIVER CIRCUIT OPEN

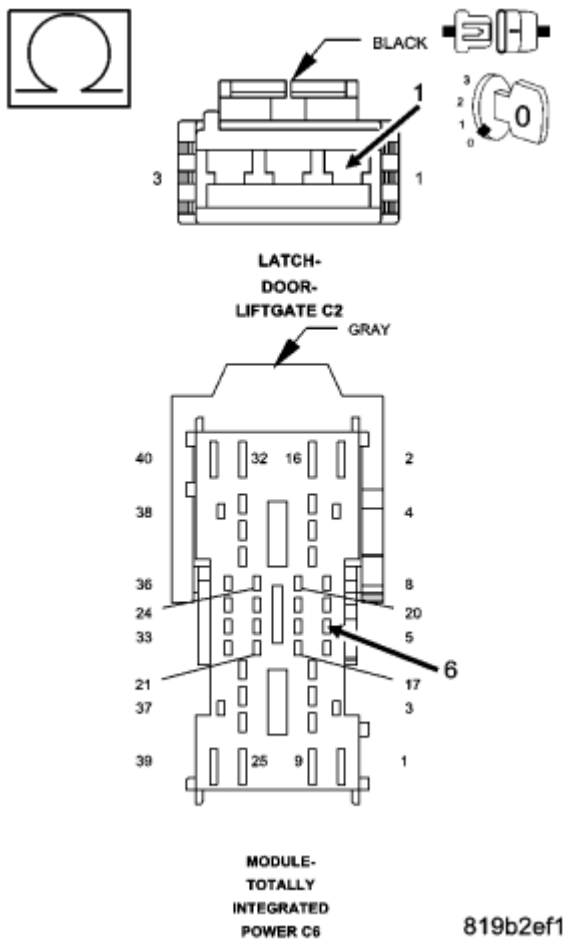


Fig. 50: Measuring Resistance Of (P304) Tailgate Lock Driver Circuit Between TIPM C6 Connector And Tailgate Latch Connector
Courtesy of CHRYSLER LLC

Disconnect the TIPM C6 connector.

Measure the resistance of the (P304) Tailgate Lock Driver circuit between the TIPM C6 connector and the Tailgate Latch connector.

Is the resistance below 2.0 ohms?

Yes

Go to step 5).

No

Repair the (P304) Tailgate Lock Driver circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

5) (P304) TAILGATE DOOR LOCK DRIVER CIRCUIT SHORT TO GROUND

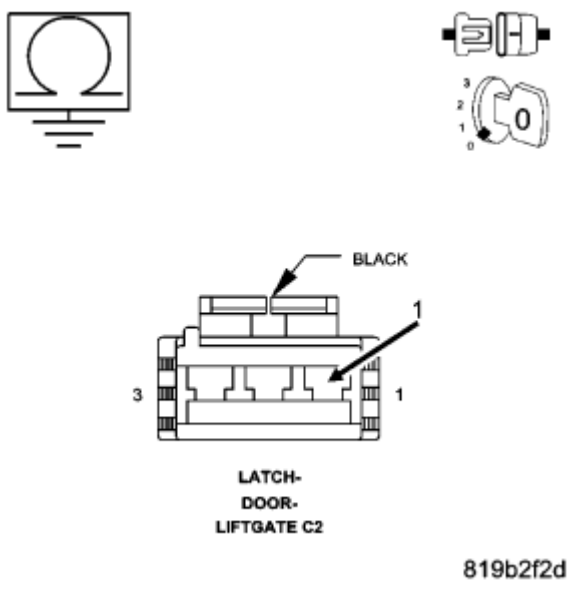


Fig. 51: Measuring Resistance Between Ground And (P304) Tailgate Lock Driver Circuit
Courtesy of CHRYSLER LLC

Measure the resistance between Ground and the (P304) Tailgate Lock Driver circuit.

Is the resistance below 1000.0 ohms?

Yes

Repair the (P304) Tailgate Lock Driver circuit for a short to ground.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module in accordance with service information.
Perform **BODY VERIFICATION TEST - VER 1** .

***ONE PASSENGER DOOR LOCK INOPERATIVE**

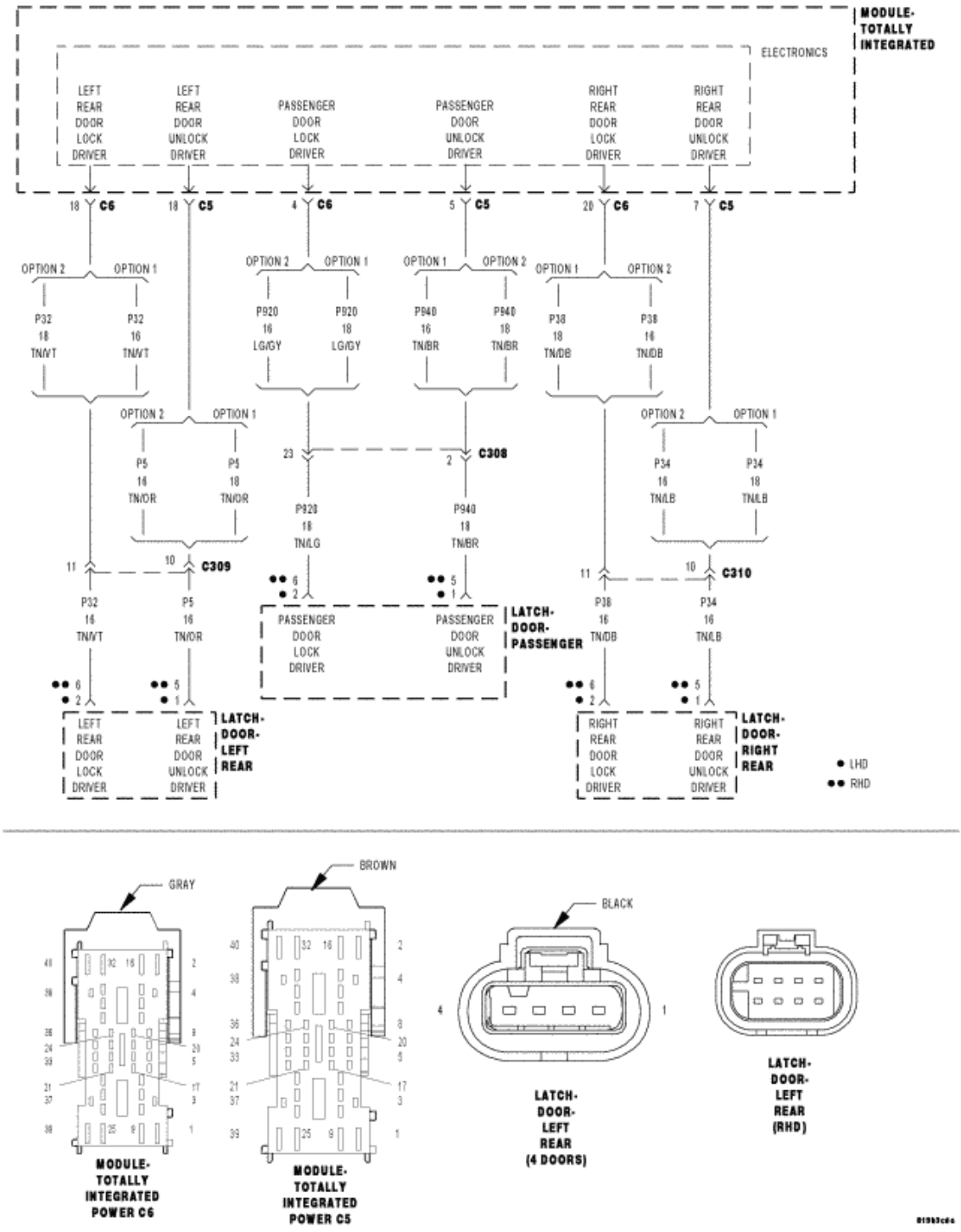


Fig. 52: Passenger Door Lock Circuit Schematic
Courtesy of CHRYSLER LLC

For complete wiring diagrams refer to **SYSTEM WIRING DIAGRAMS** article.

Possible Causes
(P32), (P38) OR (P920) DOOR LOCK DRIVER CIRCUIT OPEN
(P32, (P38) OR (P920) DOOR LOCK DRIVER CIRCUIT SHORT TO GROUND
(P5), (P34) OR (P940) DOOR UNLOCK DRIVER CIRCUIT OPEN
(P5), (P34) OR (P940) DOOR UNLOCK DRIVER CIRCUIT SHORT TO GROUND
TOTALLY INTEGRATED POWER MODULE (TIPM)
DOOR LATCH

Diagnostic Test

1) PASSENGER DOOR LATCH INOPERATIVE

NOTE: Graphics in this test show Left Rear Latch but the other 2 passenger latches are similar.

NOTE: The latch graphics in this test are for a Left Hand Drive (LHD) vehicle. For a Right Hand Drive (RHD) vehicle, refer to the schematic for the latch connector cavities.

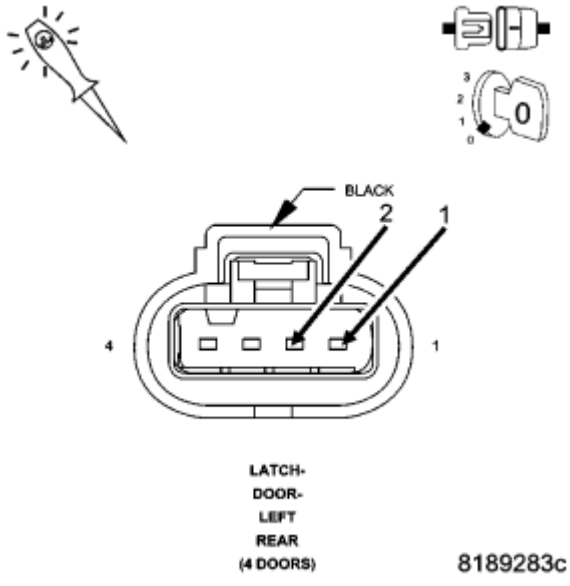


Fig. 53: Connecting Test Light Between Door Lock Driver Circuit And Door Unlock Driver Circuit
Courtesy of CHRYSLER LLC

Turn the ignition off.

Disconnect the inoperative Passenger Door latch connector.

Connect a test light between the Door Lock Driver circuit and the Door Unlock Driver circuit.

Close the front doors or trip the door latches to the closed position.

Operate the door locks in both positions and observe the test light.

Does the test light illuminate brightly for approximately 300 ms. when the door locks are actuated?

Yes

Replace the Passenger Door Latch Assembly.
Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to step 2).

2) PASSENGER DOOR UNLOCK DRIVER CIRCUIT OPEN

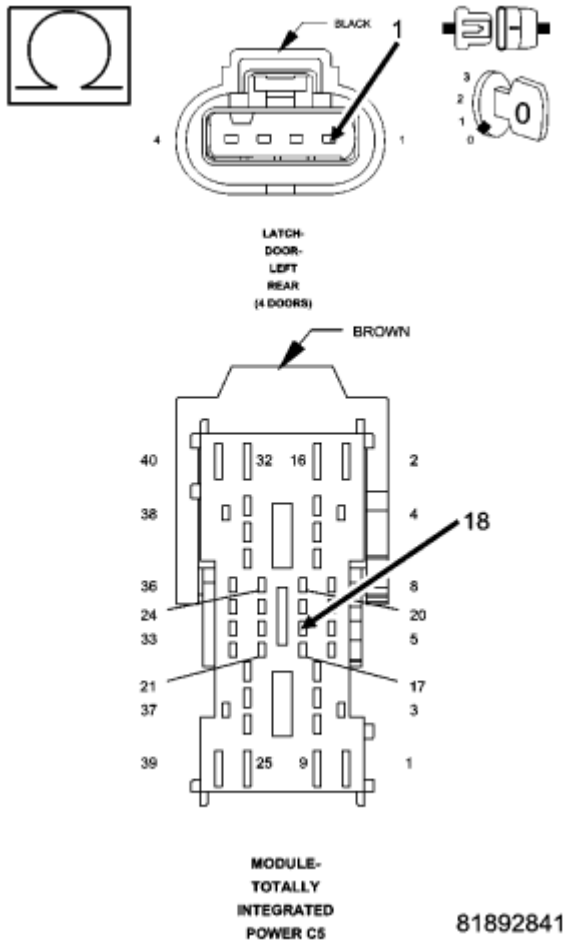


Fig. 54: Measuring Resistance Of Appropriate Door Unlock Driver Circuit Between Latch Connector And TIPM C5 Connector
Courtesy of CHRYSLER LLC

Disconnect the TIPM C5 connector.

Measure the resistance of the appropriate Door Unlock Driver circuit between the Latch connector and the TIPM C5 connector.

Is the resistance below 2.0 ohms?

No

Using the wiring diagram/schematic as a guide, measure the circuit from the in-line door harness connector to the latch connector to determine if the wire is open in the door harness or the instrument panel harness. Repair the appropriate Door Unlock Driver circuit for an open.
Perform **BODY VERIFICATION TEST - VER 1** .

Yes

Go to step 3).

3) PASSENGER DOOR UNLOCK DRIVER CIRCUIT SHORT TO GROUND

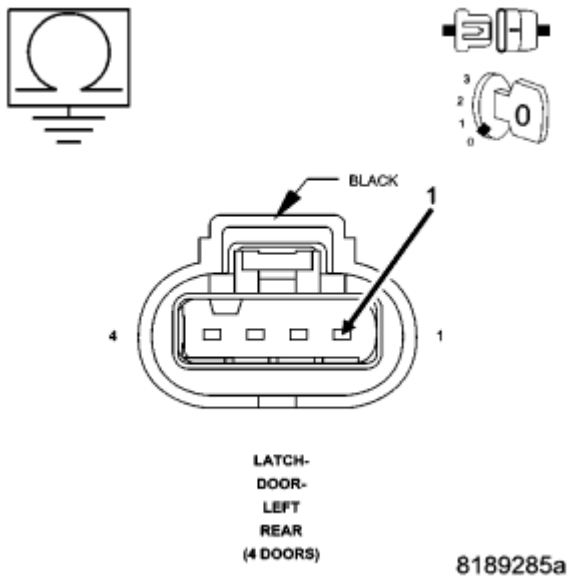


Fig. 55: Measuring Resistance Between Ground And Appropriate Door Unlock Driver Circuit
Courtesy of CHRYSLER LLC

Measure the resistance between Ground and the appropriate Door Unlock Driver circuit.

Is the resistance below 1000.0 ohms?

Yes

Using the wiring diagram/schematic as a guide, measure the circuit from the in-line door harness

connector to ground to determine if the wire is shorted in the door harness or the instrument panel harness. Repair the appropriate Door Unlock Driver circuit for a short to ground.

Perform **BODY VERIFICATION TEST - VER 1** .

No

Go to step 4).

4) PASSENGER DOOR LOCK DRIVER CIRCUIT OPEN

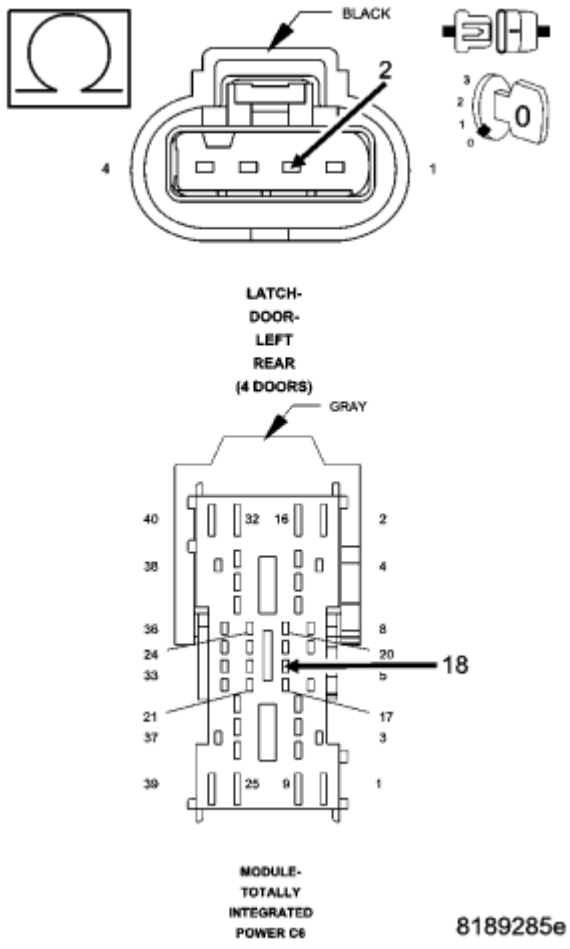


Fig. 56: Measuring Resistance Of Appropriate Door Lock Driver Circuit Between TIPM C6 Connector And Appropriate Door Latch Connector
Courtesy of CHRYSLER LLC

Disconnect the TIPM C6 connector.

Measure the resistance of the appropriate Door Lock Driver circuit between the TIPM C6 connector and the appropriate Door Latch connector.

Is the resistance below 2.0 ohms?

Yes

Go to step 5).

No

Using the wiring diagram/schematic as a guide, measure the circuit from the in-line door harness connector to the latch connector to determine if the wire is open in the door harness or the instrument panel harness. Repair the appropriate Door Lock Driver circuit for an open.

Perform **BODY VERIFICATION TEST - VER 1** .

5) PASSENGER DOOR LOCK DRIVER CIRCUIT SHORT TO GROUND

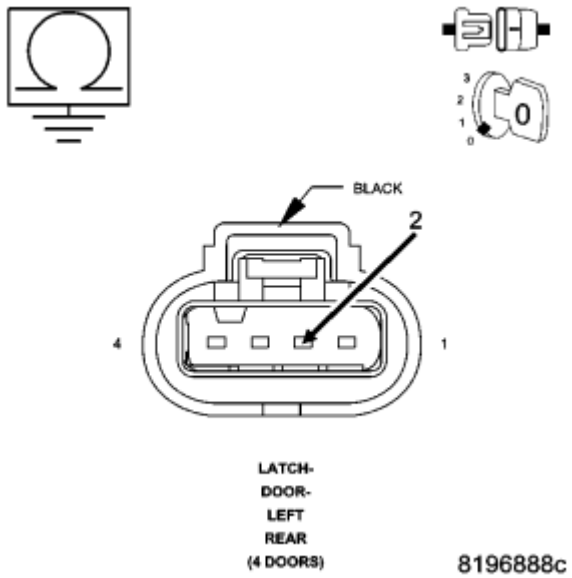


Fig. 57: Measuring Resistance Between Ground And Appropriate Door Lock Driver Circuit
Courtesy of CHRYSLER LLC

Measure the resistance between Ground and the appropriate Door Lock Driver circuit.

Is the resistance below 1000.0 ohms?

Yes

Using the wiring diagram/schematic as a guide, measure the circuit from the in-line door harness connector to ground to determine if the wire is shorted in the door harness or the instrument panel harness. Repair the appropriate Door Lock Driver circuit for a short to ground.

Perform **BODY VERIFICATION TEST - VER 1** .

No

Replace the Totally Integrated Power Module in accordance with service information.

Perform **BODY VERIFICATION TEST - VER 1** .